



CONTRACT NO. 14-0601

for FIRE APPARATUS

LAKE COUNTY, FLORIDA, a political subdivision of the state of Florida, its successors and assigns through its Board of County Commissioners (hereinafter "County") does hereby accept, with noted modifications, if any, the bid of **Pierce Manufacturing, Inc.** (hereinafter "Contractor") to supply fire apparatus to the County pursuant to County Bid number 14-0601 (hereinafter "Bid"), addenda nos. 1 and 2, opening dated September 18, 2013 and Contractor's September 16, 2013 Bid response thereto with all County Bid provisions governing.

A copy of the Contractor's signed Bid is attached hereto and incorporated herein, thus making it a part of this Contract except that any items not awarded have been struck through. The attachments noted below (if any) are attached hereto and are also made a part of this Contract.

Attachments: All back-up documentation.

No financial obligation under this contract shall accrue against the County until a specific purchase transaction is completed pursuant to the terms and conditions of this contract.

Contractor shall submit the documents hereinafter listed prior to commencement of this Contract: Insurance Certificate.

The County's Procurement Services Director shall be the sole judge as to the fact of the fulfillment of this Contract, and upon any breach thereof, shall, at his or her option, declare this contract terminated, and for any loss or damage by reason of such breach, whether this Contract is terminated or not, said Contractor and their surety for any required bond shall be liable.

This Contract is effective from October 22, 2013 through October 21, 2014 except the County reserves the right to terminate this Contract immediately for cause and/or lack of funds and with thirty (30) day written notice for the convenience of the County. This Contract provides for four (4) one (1) year renewals at Lake County's sole option at the terms noted in the Bid.

Any and all modifications to this Contract must be in writing signed by the County's Procurement Services Director.

LAKE COUNTY, FLORIDA

By: 
Contracting Officer

Date: 10-22-2013

Distribution: Original-Bid File
Copy-Contractor
Copy-Department

"Earning Community Confidence Through Excellence in Service"

Office of Procurement Services
Tavares, Florida 32778-7800

315 W. Main, Suite 441
Ph (352) 343-9839

P.O. Box 7800
Fax (352) 343-9473



LAKE COUNTY FLORIDA

INVITATION TO BID (ITB) FIRE APPARATUS

ITB Number: 14-0601 Contracting Officer: Donna Villinis
Bid Due Date: September 18, 2013 Pre-Bid Conf. Date: Not applicable
Bid Due Time: 3:00 p.m. ITB Issue Date: August 22, 2013

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SPECIFIC SOLICITATION REQUIREMENTS ARE AS NOTED BELOW:

Proposal and/or Performance Bond:	Not applicable for this solicitation
Certificate of Competency/License:	Not applicable for this solicitation
Indemnification/Insurance:	See Section 1.8
Pre-Bid Conference/Walk-Thru:	Not applicable for this solicitation

At the date and time specified above, all bids that have been received in a timely manner will be opened, recorded, and accepted for consideration. The names of the bidders submitting bids will be read aloud and recorded. The bids will be available for inspection during normal business hours in the Office of Procurement Services thirty (30) calendar days after the official bid due date. When countersigned by an authorized County representative, this document and any specifically identified attachments may form the contract document binding the parties to all performance specified herein.

Vendors shall complete and return the entirety of this ITB Document, and attach all other information requested in this ITB document (See Provision 1.13). Failure to sign the bid response, or to submit the bid response by the specified time and date, may be cause for rejection of the bid.

NO-RESPONSE REPLY

If any vendor does not want to respond to this solicitation at this time, or, would like to be removed from Lake County's Vendor List, please mark the appropriate space, complete name below and return this page only.

- ☐ Not interested at this time; keep our firm on Lake County's Vendors List for future solicitations for this product / service.
- ☐ Please remove our firm from Lake County's Vendor's List for this product / service.

VENDOR IDENTIFICATION:

Company Name: Pierce Manufacturing, Inc. Phone Number: (920) 832-3231
E-mail Address: rboggus@ten8fire.com Contact Person: Robert Boggus

Section 1.1: Purpose

The purpose of this solicitation is to establish a contract with a single contractor for: (1) an initial purchase of the specific fire apparatus specified herein and, (2) to provide for an indefinite quantity contract with the awarded contractor for future purchases of various specified and unspecified fire apparatus. The resulting contract shall guarantee the construction and delivery to the County of any additional fire apparatus as may be required by the County throughout the initial contract term and any subsequent contract renewal periods.

Orders for apparatus and related equipment will be by issuance of a purchase order throughout the contract period as needs and the availability of funds are determined.

Only apparatus proposed from companies which are actively engaged in manufacturing apparatus comparable and have been in the business for a minimum of fifteen years with an established favorable reputation shall be considered.

Section 1.2: Designated Procurement Representative

Questions concerning any portion of this solicitation shall be directed in writing [fax and e-mail accepted] to the below named individual who shall be the official point of contact for this solicitation. To ensure reply, questions should be submitted no later than seven (7) working days before the bid due date.

Donna Villinis, CPPB, Senior Contracting Officer
Lake County BCC
Office of Procurement Services
315 W. Main Street, Room 441
PO BOX 7800
Tavares, FL 32778-7800

Phone : 352.343.9839
Fax : 352.343.9473
E-mail: dvillinis@lakecountyfl.gov

No answers given in response to questions submitted shall be binding upon this solicitation unless released in writing as an addendum to the solicitation by the Lake County Office of Procurement Services.

Section 1.3: Method of Award

As the best interests of the County may require, the County reserves the right to make award(s) on a lowest price basis by individual item, group of items, all or none, or a combination thereof, with one or more vendor(s); to reject any and all offers or waive any minor irregularity or technicality in bids received.

Section 1.4: Pre-Bid Conference / Site Visits

Not applicable to this solicitation.

Section 1.5: Term of Contract

This contract shall commence on the first calendar day of the month succeeding approval of the contract by the Board of County Commissioners, or designee, unless otherwise stipulated in the Notice of Award Letter distributed by the County's Office of Procurement Services; and contingent upon the completion and submittal of all required pre-award documents. The initial contract term shall remain in effect for twelve (12) months, and then the contract will remain in effect until completion of the expressed and/or implied warranty period. The contract prices resultant from this solicitation shall prevail for the full duration of the initial contract term unless otherwise indicated elsewhere in this document.

Section 1.6: Option to Renew

Prior to, or upon completion, of the initial term of this contract, the County shall have the option to renew this contract for four (4) additional one (1) year period(s). Prior to completion of each exercised contract term, the County may consider an adjustment to price based on an applicable Manufacturers Price Increase evidenced by appropriate manufacturer documentation submitted to the County as instructed below.

It is the vendor's responsibility to request in writing any pricing adjustment under this provision. The vendor's written request for adjustment should be submitted thirty (30) calendar days prior to expiration of the then current contract term. The vendor adjustment request must clearly substantiate the requested increase. The written request for adjustment should not be in excess of the relevant pricing index change. If no adjustment request is received from the vendor, the County will assume that the vendor has agreed that the optional term may be exercised without pricing adjustment. Any adjustment request received after the commencement of a new option period shall not be considered.

The County reserves the right to reject any written price adjustments submitted by the vendor and/or to not exercise any otherwise available option period based on such price adjustments. Continuation of the contract beyond the initial period, and any option subsequently exercised, is a County prerogative, and not a right of the vendor. This prerogative will be exercised only when such continuation is clearly in the best interest of the County.

Section 1.7: Method of Payment - Phased Payments for Units Delivered

The County shall provide periodic payments for units delivered by the vendor. The vendor shall provide a fully documented invoice to the County user department(s) that requested the units through a purchase order. In addition to the basic information set forth below, the invoices shall identify critical, descriptive data including, but not limited to, model numbers, VIN numbers and/or serial numbers. It shall be understood that such invoices shall not be authorized for payment until such time as a County representative has inspected and approved the units.

All invoices shall contain the contract and/or purchase order number, date and location of delivery or service, and confirmation of acceptance of the goods or services by the appropriate County representative. Failure to submit invoices in the prescribed manner will delay payment, and the vendor may be considered in default of contract and its contract may be terminated. Payments shall be tendered in accordance with the Florida Prompt Payment Act, Part VII, Chapter 218, Florida Statutes.

Section 1.8: Insurance

Each vendor shall include in its solicitation response package proof of insurance capabilities, including but not limited to, the following requirements: [This does not mean that the vendor must have the coverage prior to submittal, but, that the coverage must be in effect prior to a purchase order or contract being executed by the County.]

An original certificate of insurance, indicating that the awarded vendor has coverage in accordance with the requirements of this section, shall be furnished by the vendor to the Contracting Officer within five (5) working days of such request and must be received and accepted by the County prior to contract execution and/or before any work begins.

The vendor shall provide and maintain at all times during the term of any contract, without cost or expense to the County, policies of insurance, with a company or companies authorized to do business in the State of Florida, and which are acceptable to the County, insuring the vendor against any and all claims, demands or causes of action whatsoever, for injuries received or damage to property relating to the performance of duties, services and/or obligations of the vendor under the terms and provisions of the contract. The vendor is responsible for timely provision of certificate(s) of insurance to the County at the certificate holder address evidencing conformance with the contract requirements at all times throughout the term of the contract.

Such policies of insurance, and confirming certificates of insurance, shall insure the vendor is in accordance with the following minimum limits:

General Liability insurance on forms no more restrictive than the latest edition of the Occurrence Form Commercial General Liability policy (CG 00 01) of the Insurance Services Office or equivalent without restrictive endorsements, with the following minimum limits and coverage:

Each Occurrence/General Aggregate	\$1,000,000/2,000,000
Products-Completed Operations	\$2,000,000
Personal & Adv. Injury	\$1,000,000
Fire Damage	\$50,000
Medical Expense	\$5,000
Contractual Liability	Included

Automobile liability insurance, including owned, non-owned, and hired autos with the following minimum limits and coverage:

Combined Single Limit	\$1,000,000
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Workers' compensation insurance based on proper reporting of classification codes and payroll amounts in accordance with Chapter 440, Florida Statutes, and/or any other applicable law requiring workers' compensation (Federal, maritime, etc). If not required by law to maintain workers compensation insurance, the vendor must provide a notarized statement that if he or she is injured; he or she will not hold the County responsible for any payment or compensation.

Employers Liability insurance with the following minimum limits and coverage:

Each Accident	\$1,000,000
Disease-Each Employee	\$1,000,000
Disease-Policy Limit	\$1,000,000

Professional liability and/or specialty insurance (medical malpractice, engineers, architect, consultant, environmental, pollution, errors and omissions, etc.) insurance as applicable, with minimum limits of \$1,000,000 and annual aggregate of \$2,000,000.

The following additional coverage must be provided if a dollar value is inserted below:

Loss of Use at coverage value: \$ _____
Garage Keepers Liability at coverage value: \$ _____

Lake County, a Political Subdivision of the State of Florida, and the Board of County Commissioners, shall be named as additional insured as their interest may appear on all applicable liability insurance policies.

The certificate(s) of insurance, shall provide for a minimum of thirty (30) days prior written notice to the County of any change, cancellation, or nonrenewal of the provided insurance. It is the vendor's specific responsibility to ensure that any such notice is provided within the stated timeframe to the certificate holder.

If it is not possible for the Vendor to certify compliance, on the certificate of insurance, with all of the above requirements, then the Vendor is required to provide a copy of the actual policy endorsement(s) providing the required coverage and notification provisions.

Certificate(s) of insurance shall identify the applicable solicitation number (ITB 13-0611) in the Description of Operations section of the Certificate.

Certificate holder shall be:

LAKE COUNTY, A POLITICAL SUBDIVISION OF THE STATE OF
FLORIDA, AND THE BOARD OF COUNTY COMMISSIONERS.
P.O. BOX 7800
TAVARES, FL 32778-7800

Certificates of insurance shall evidence a waiver of subrogation in favor of the County, that coverage shall be primary and noncontributory, and that each evidenced policy includes a Cross Liability or Severability of Interests provision, with no requirement of premium payment by the County.

The Vendor shall be responsible for subcontractors and their insurance. Subcontractors are to provide certificates of insurance to the prime vendor evidencing coverage and terms in accordance with the Vendor's requirements.

All self-insured retentions shall appear on the certificate(s) and shall be subject to approval by the County. At the option of the County, the insurer shall reduce or eliminate such self-insured retentions, or the vendor or subcontractor shall be required to procure a bond guaranteeing payment of losses and related claims expenses.

The County shall be exempt from, and in no way liable for, any sums of money, which may represent a deductible or self-insured retention in any insurance policy. The payment of such deductible or self-insured retention shall be the sole responsibility of the vendor and/or subcontractor providing such insurance.

Failure to obtain and maintain such insurance as set out above will be considered a breach of contract and may result in termination of the contract for default.

Neither approval by the County of any insurance supplied by the vendor or Subcontractor(s), nor a failure to disapprove that insurance, shall relieve the vendor or Subcontractor(s) of full responsibility for liability, damages, and accidents as set forth herein.

Section 1.9: Bonding Requirements

Not applicable to this solicitation.

Section 1.10: Delivery

Delivery dates shall be negotiated prior to the issuance of purchase orders. All deliveries shall be made in accordance with good commercial practice and all required delivery timeframes shall be adhered to by the vendor, except in such cases where the delivery will be delayed due to acts of God, strikes, or other causes beyond the control of the vendor. In these cases, the vendor shall notify the County of the delays in advance of the original delivery date so that a revised delivery schedule can be appropriately considered by the County.

Should the vendor(s) to whom the contract(s) is awarded fail to deliver a specific order in the number of days negotiated, the County reserves the right to cancel the contract on a default basis after any back order period that has been specified in this contract has lapsed. If the contract is so terminated, it is hereby understood and agreed that the County has the authority to purchase the equipment elsewhere and to charge the incumbent vendor with any re-procurement costs.

Certain County employees may be authorized in writing to pick-up materials under this contract. Vendors shall require presentation of this written authorization. The vendor shall maintain a

copy of the authorization. If the vendor is in doubt about any aspect of material pick-up, vendor shall contact the appropriate user department to confirm the authorization.

Apparatus, to insure proper break in of all components while under warranty, shall be delivered under its own power. Rail or truck freight is not acceptable. A qualified delivery engineer representing the bidder shall deliver the apparatus and remain for a length of time sufficient to thoroughly instruct required personnel in the proper operation, care and maintenance of the equipment delivered.

Section 1.10.1: Shipping Terms, F.O.B. Destination

All vendors shall quote prices based on F.O.B. Destination, and shall hold title to the goods until such time as they are delivered to, and accepted by, an authorized County representative at Lake County Public Safety.

Section 1.11: Acceptance of Goods or Services

The apparatus delivered as a result of an award from this solicitation shall remain the property of the vendor, and services rendered under the contract will not be deemed complete, until a physical inspection and actual usage of the apparatus and/or service(s) are accepted by the County, and found to be in compliance with the terms herein, fully in accord with the specifications, and of the highest quality.

Any apparatus and/or services purchased as a result of this solicitation and/or contract may be tested/inspected for compliance with specifications. In the event that any aspect of the goods or services provided is found to be defective or does not conform to the specifications, the County reserves the right to terminate the contract or initiate corrective action on the part of the vendor, to include return of any non-compliant goods to the vendor at the vendor's expense, requiring the vendor to either provide a direct replacement for the item, or a full credit for the returned item. The vendor shall not assess any additional charge(s) for any conforming action taken by the County under this clause. The County will not be responsible to pay for any product or service that does not conform to the contract specifications.

In addition, any defective product or service or any product or service not delivered or performed by the date specified in the purchase order or contract, may be procured by the County on the open market, and any increase in cost may be charged against the awarded vendor. Any cost incurred by the County in any re-procurement plus any increased product or service cost shall be withheld from any monies owed to the vendor by the County for any contract or financial obligation.

Section 1.12: Warranty**A. Type of Warranty Coverage Required**

The vendor should supply a copy of its written warranty certificates with its initial offer; however, the vendor may be given the opportunity to submit these certificates to the County during the offer evaluation period. Failure to meet this requirement may result in rejection of the

vendor's offer. The warranty supplied by the vendor shall remain in force for the full period identified by the vendor; regardless of whether the vendor is under contract with the County at the time of defect. Any payment by the County on behalf of the goods or services received from the vendor does not constitute a waiver of these warranty provisions.

B. Correcting Defects Covered Under Warranty

The vendor shall be responsible for promptly correcting any deficiency, at no cost to the County, within thirty (30) calendar days after the County notifies the vendor of such deficiency in writing. If the vendor fails to honor the warranty and/or fails to correct or replace the defective work or items within the period specified, the County may, at its discretion, notify the vendor, in writing, that the vendor may be debarred as a County vendor, and/or become subject to contractual default if the corrections or replacements are not completed to the satisfaction of the County within thirty (30) calendar days of receipt of the notice. If the vendor fails to satisfy the warranty within the period specified in the notice, the County may (a) place the vendor in default of its contract, and/or (b) procure the products or services from another source and charge the incumbent vendor for any additional costs that are incurred by the County for this work or items; either through a credit memorandum or through invoicing.

The bidder shall have full responsibility of warranty of all components of the equipment. A statement shall be attached with the bid setting out the conditions of the warranty(s) printed on company letterhead. The manufacturer's standard warranty shall be furnished. Warranty shall include parts and service for a minimum of **two (2) years**. Warranty shall become effective when the vehicle is accepted by the County rather than time of delivery. Vehicles and equipment must meet all ANSI, SAE and other applicable standards.

It is the County's desire to have a warranty policy made with one company and to be able to execute all warranties through one service department.

If the bid offered included more than one warranty or more than one service department and parts department then a list must be provided of difference dealer names and locations. The bidder shall list the nearest licensed and authorized factory dealer for the chassis.

The bidder shall include as part of the bid, a quotation on any extended warranty's which may be offered by the bidder or OEM.

This warranty shall not apply:

- 1) To normal maintenance and adjustments.
- 2) To any vehicle which has been repaired or altered outside of the factory in any way so that, in the manufacturer's judgment, it would affect the stability. Also it shall not apply to any vehicle which has been subject to misuse, neglect, or accident, or to any vehicle which shall operate at any speed exceeding the factory rated speed, or loaded beyond the factory rated load capacity.

3) To commercial chassis and associated equipment furnished with the chassis, signaling devices, generators, batteries, or other trade accessories in which they are usually warranted separately by their respective manufacturers.

This warranty is in lieu of all other warranties, expressed or implied, all others representations to the original purchaser and all other obligations or liabilities, including liability for incidental or consequential damages on the part of the company. The manufacturer neither assumes nor authorizes any other person to give or assume any other warranty or liability on the company's behalf, unless made or assumed in writing by the company.

The transmission shall have a **five (5) year/unlimited mileage** warranty covering 100% parts and labor. The warranty shall be provided by transmission manufacturer and not the apparatus builder.

A copy of the fire apparatus manufacturer's warranty shall be included with the bid. The warranty shall state that the body shall be free of structural failures caused by defective design or workmanship for a warranty period of **ten (10) years** from the date the new vehicle is first delivered **or 100,000 miles**, whichever occurs first and that defective parts, under the warranty, shall be repaired or replaced without charge to the original purchaser.

The engine shall come with a **five (5) year** warranty provided by the engine manufacturer.

The water tank shall have a **lifetime** warranty.

If the tank manufacturer determines that the tank problem has rendered the truck out-of-service, the tank manufacturer shall dispatch a service technician **WITHIN 48 HOURS (2 DAYS)** to repair the tank (This time period is for the United States and Canada only).

A **five (5) year** warranty shall be provided for the warranty of the pump.

The stainless steel plumbing components and ancillary brass fittings used in the construction of the water/foam plumbing system shall be warranted for a period of **ten (10) years or 100,000 miles**. This covers structural failures caused by defective design or workmanship, or perforation caused by corrosion, provided the apparatus is used in a normal and reasonable manner. This warranty is extended only to the original purchaser for a period of **ten (10) years** from the date of delivery. A copy of the warranty shall be submitted with the bid. (No exceptions)

Valves shall have a **ten (10) year** warranty.

The body exterior paint finish shall be warranted against blistering, peeling, corrosion, lack of adhesion or any other manufacturing or material defect for a period of **ten (10) years**.

The body shall also be warranted against corrosion perforation for a period of **ten (10) years**.

A copy of the manufacturer's warranty shall be included with the bid.

Section 1.13 Delivery and Completion of Solicitation Response**Section 1.13.1: Delivery of Solicitation Response**

Unless a package is delivered by the vendor in person, all incoming mail from the U.S. Postal Service and any package delivered by a third party delivery organization (FedEx, UPS, DHL, private courier, etc.) will be opened for security and contamination inspection by the Lake County Clerk of the Circuit Court Mail Receiving Center in an off-site secure controlled facility prior to delivery to any Lake County Government facility, which includes the Lake County Office of Procurement Services.

To be considered for award, a bid or proposal must be received and accepted in the Office of Procurement Services prior to the date and time established within the solicitation. A response will not be considered for award if received in the Office of Procurement Services after the official due date and time regardless of when or how it was received by the Lake County Clerk of Court Mail Receiving Center. Allow sufficient time for transportation and inspection.

Each package shall be clearly marked with the applicable solicitation number, title, and company name. Ensure that your bid or proposal is securely sealed in an opaque envelope/package to provide confidentiality of the bid or proposal prior to the due date stated in the solicitation.

If you plan on submitting your bid or proposal **IN PERSON**, please bring it to:

LAKE COUNTY PROCUREMENT SERVICES
315 W. MAIN STREET
4TH FLOOR, ROOM 441
TAVARES, FLORIDA

If you submit your bid or proposal by the **UNITED STATES POSTAL SERVICE (USPS)**, please mail it to:

LAKE COUNTY PROCUREMENT SERVICES
PO BOX 7800
TAVARES, FL 32778-7800

If you submit your bid or proposal by a **THIRD PARTY CARRIER** such as FedEx, UPS, or a private courier, please send it to:

LAKE COUNTY PROCUREMENT SERVICES
MAIL RECEIVING CENTER
32400 COUNTY ROAD 473
LEESBURG, FL 34788

Facsimile (fax) or electronic submissions (e-mail) will not be accepted.

Section 1.13.2: Completion Requirements for Invitation to Bid

Two (2) signed original bids (complete ITB document) and two (2) complete copies of the bid submitted by the vendor shall be sealed and delivered to the Office of Procurement Services no later than the official bid due date and time. Any bid received after this time will not be considered and will be returned unopened to the submitter. The County is not liable or responsible for any costs incurred by any Bidder in responding to this ITB including, without limitation, costs for product and/or service demonstrations if requested.

When you submit your bid, you are making a binding offer to the County and are agreeing to all of the terms and conditions in this Invitation to Bid. Use only the form(s) provided in this document. If you make any change to the content or format of any form, the County may disqualify your offer. All information shall be legible and either written in ink or typewritten. If you make a correction or change on any document, the person signing the bid proposal must initial the change. The bid shall be manually signed in **BLUE INK** by an official authorized to legally bind the Bidder to its provisions.

COMPLETION OF BID PACKAGE: The vendor shall complete all required entries in Section 4 of the bid form such as, but not limited to, pricing pages, signature, certifications, references, and acknowledgement of any solicitation addenda. The vendor shall submit the entire solicitation with all Section 4 entries completed in the number of copies specified to the address specified in this solicitation. The vendor shall also submit any supporting documents (to include proof of insurability and provision of bid bonds as required), samples, and/or descriptive literature required by any of the provisions in Section 2 of the solicitation in a separate sealed envelope / package marked "Literature for Bid 13-0611." Do not indicate bid prices on literature.

Specific Completion Directions:

- Pricing shall be completed as directed within Section 4.
- Initial and date in **BLUE INK** the appropriate space(s) for each addendum you received for this ITB.
- Insert any prompt payment discount that you will offer. Note payment is NET 30 DAYS otherwise.
- Complete all certifications included within Section 4 of the solicitation.
- Complete the reference information sheets (include at least three references) contained within the solicitation.
- Complete the vendor information, and sign the bid (IN BLUE INK) in the spaces provided in Section 4 of the solicitation.
- If insurance is required, submit either a certificate of insurance, or evidence of insurability, that is in compliance with the stated insurance requirements.

Section 1.14: Compliance with Federal Standards

All items to be purchased under this contract shall be in accordance with all governmental standards, to include, but not be limited to, those issued by the Occupational Safety and Health Administration (OSHA), the National Institute of Occupational Safety Hazards (NIOSH), and the National Fire Protection Association (NFPA).

Section 1.15: Cooperative Purchases

The awarded Contractor shall agree to allow any Political Subdivisions of the State of Florida, and/or any other State, County, and Local agencies, Special and/or Volunteer Fire Districts to purchase apparatus at the bid pricing under the same conditions, processes and contract periods. Each ordering agency shall be responsible for their paperwork and billed separately. Lake County shall not be responsible for any costs, damages, etc.; incurred by any entity should they enter into any resultant contracts derived from this bid request.

Lake County has the sole authority to modify the contract.

The awarded contractor shall submit in writing entities requesting to utilize contract quarterly.

Section 1.16: Demonstration of Equipment May Be Required During Evaluation

After receipt of offers by the County, the vendors may be required to demonstrate their specifically offered equipment to cognizant County personnel, at no separate cost. The purpose of this demonstration is to observe the equipment in an operational environment and to verify its capability, suitability, and adaptability in conjunction with the performance requirements stipulated in this solicitation. If a demonstration is required, the County will notify the vendor of such in writing and will specify the date, time and location of the demonstration. If the vendor fails to perform the demonstration on the specified date stipulated in the notice, the County may elect to reject that vendor's offer, or to re-schedule the demonstration, whichever action is determined to be in the best interests of the County. The County shall be the sole judge of the acceptability of the equipment in conformance with the specifications and its decision shall be final.

The equipment used for the demonstration shall be the same as the manufacturer's model identified in the vendor's offer. Accordingly, the equipment used in the demonstration shall create an express warranty that the actual equipment to be provided by the vendor during the contract period shall conform to the equipment used in the demonstration. The vendor shall be required to provide adequate restitution to the County, in the manner prescribed by the County, if this warranty is violated during the term of the contract.

Section 1.17: "Equal" Products

If a product or service requested by this ITB has been identified in the specifications by a brand name, and has not been notated as a "No Substitute" item, such identification is intended to be descriptive and not restrictive, and is to indicate the quality and characteristics of product or service that will be acceptable. Vendors offering an alternate product will be considered for

award if such product is clearly identified in the bid or proposal and is determined by the County to fully meet the salient characteristic requirements listed in the specifications. An alternate product will not be considered for any item notated "No Substitute".

Unless the vendor clearly indicates in its bid or proposal that it is proposing an alternate product, the bid or proposal shall be considered as offering the same brand name referenced in the specifications.

If the vendor proposes to furnish an alternate product or service, the brand name of the product or service to be furnished shall be clearly identified. The evaluation of the bid or proposal and the determination as to acceptability of the alternate product or service shall be the responsibility of the County and will be based upon information furnished by the vendor. The County will not be responsible for locating or securing any information which is not included in the bid or proposal. To ensure that sufficient information is available, the vendor shall furnish as part of the bid or proposal all descriptive material necessary for the County to determine whether the product offered meets the salient characteristics required by the specifications. Failure to do so may be considered a material deviation supportive of rejection of the bid.

Section 1.18: Estimated Quantities

Any contract entered into shall be of the "open end" type. The contractor shall deliver such quantities as may be ordered, and the contract shall be binding only for the actual quantities ordered during the contract period. Order(s) shall be issued throughout the contract period by issuance of purchase orders as needs are determined.

The quantities indicated in the pricing section are the apparatus that may be ordered initially with award of the ITB. Future orders are dependent on the appropriation of funds.

Section 1.19: Factory Delays

Factory scheduling delays shall be reported to the County in writing. Delays should be addressed to:

Donna Villinis, Senior Contracting Officer
Lake County BCC
Office of Procurement Services
315 W. Main Street, Room 416
PO BOX 7800
Tavares, FL 32778-7800

Section 1.20: Licenses, Permits and Fees

The vendor shall obtain and pay for all licenses, permits and inspection fees required for this project; and shall comply with all laws, ordinances, regulations and building code requirements applicable to the work contemplated herein. Damages, penalties and or fines imposed on the County or the vendor for failure to obtain required licenses, permits, inspection fees, or inspections shall be borne by the vendor.

Section 1.21: Maintenance Agreement

A maintenance agreement shall be available to the County after the expiration of the apparatus warranty period. Bidder shall submit a copy of the proposed maintenance agreement with their bid submittal.

Section 1.22: Omission from the Specifications

The apparent silence of this specification and any addendum regarding any details or the omission from the specification of a detailed description concerning any point shall be regarded as meaning that only the best commercial practices are to prevail, and that only materials and workmanship of first quality are to be used. All interpretations of this specification shall be made upon the basis of this agreement.

Section 1.23: Parts and Service

Bidders shall furnish with their bid submittal a statement identifying where parts and service for the apparatus offered are available to the County.

Section 1.24: Patents and Royalties

A. The Contractor, without exception, shall indemnify and hold harmless the County, its employees and officers from liability of any nature or kind, including cost and expenses for or on account of any copyrighted, patented, or un-patented invention, process or article provided by the Contractor. The Contractor has no liability when such claim is solely and exclusively due to the combination, operation, or use of any article supplied hereunder with equipment or data not supplied by the Contractor or is based solely and exclusively upon the County's alteration of the article. The County will provide prompt written notification of a claim of copyright or patent infringement.

B. Further, if such a claim is made or is pending, the Contractor may, at its options and expenses, procure for the County the right to continue use of, replace or modify the article to render it non-infringing. (If none of the alternatives are reasonably available, the County agrees to return the article on request to the contractor and receive full reimbursement of all monies paid to the Contractor). If the Contractor uses any design, device, or materials covered by letters, patent or copyright, it is mutually agreed and understood without exception that the bid proposal price(s) include all royalties and/or costs arising from the use of such design, device or materials in any way involved in the work.

C. The Contractor will defend, at its own expense, any action brought against the County to the extent that it is based on a claim that the article supplied by the Contractor under the contract infringes a patent, industrial design, or any other similar right, and the Contractor will pay any costs and damages finally awarded against the County in any such action, where they are attributable to any such claim, but such defense and payments are conditional on the following:

- the Contractor will be notified promptly in writing by the County of any notice of such claim received by the County, and
- the Contractor will have the sole control of the defense of any action or such claims, and all negotiations for its settlement or compromise.

Section 1.25: Purchase of Other Items Not Listed Within this Solicitation Based on Price Quotes

While the County has listed major items within this solicitation which are utilized by County departments in conjunction with their operations, there may be ancillary or similar items that must be purchased by the County during the term of this contract. Under these circumstances, a County representative will contact the primary vendor to obtain a price quote for the ancillary items. If there are multiple vendors on the contract, the County representative may also obtain price quotes from these vendors. The County reserves the right to award these ancillary items to the primary contract vendor, another contract vendor based on the lowest price quoted, or to acquire the items through a separate solicitation.

Section 1.26: Repairs and Parts Manuals to be provided

The vendor shall supply the County with a minimum of three (3) comprehensive repair and parts manuals which identify the component parts, and which describe the appropriate process for repairing the equipment purchased by the County in conjunction with this solicitation. The manuals shall be supplied prior to, or upon, delivery of the equipment. Final payment shall be withheld until such time as these manuals are received by the County.

The service parts information included in these manuals should also be available on the factory website.

A CD format service manual supplement containing parts and service information on factory installed components shall also be provided with the completed unit.

The manual shall be specifically written for the unit being purchased. It shall not be a generic manual for a multitude of different units.

Section 1.27: Rebates and Special Promotions

All administrative credits issued, rebates and/or special promotions offered by a manufacturer during the term of the contract shall be passed on by the vendor(s) to the County. It shall be the responsibility of the vendor to notify the County of such credits, rebates and/or special promotions during the contract period and/or attached to Section 4, Pricing Section, of the vendor(s) bid response.

Special promotions shall be offered by the vendor(s) to the County provided that the new price charged for the item(s) is lower than would otherwise be available through the contract. It is understood that these special promotions may be of a limited duration. At the end of such promotion, the standard contract price shall prevail.

Section 1.28: Service Facilities shall be Available from Reliable Sources in Central Florida

While this solicitation is for the acquisition of equipment, offers will only be accepted from vendors which can certify that service facilities will be available from reliable sources in Central Florida (defined as Lake, Osceola, Orange, Seminole, Volusia, Marion, Polk, and Sumter counties) for parts and repairs. As part of its initial offer, the vendor shall either certify through a written statement that the vendor has its own facility within the stated area for servicing the equipment, or certify through a written agreement with an alternate source, that this alternate source will be available for servicing the equipment that will be provided by the vendor. If this certification is not provided with the initial offer, the vendor may be given the opportunity to submit the certification to the County during the offer evaluation period should such action be considered to be in the best interest of the County.

The County reserves the right to perform an inspection of these service facilities during the offer evaluation period, and any time during the term of the contract, and to use this inspection as a means for determining the vendor to which award will be made under this solicitation. The acceptability of the size, location, level of security, and overall functionality of the service facility shall be determined by the County in consideration of the contract requirements. The County's best interests shall prevail in this regard, and the decision of the County shall be final.

Section 1.29: Special Notice to Vendors Regarding Federal and/or State Requirements

Upon award of a contract resulting from this solicitation, the vendor shall utilize the U.S. Department of Homeland Security's E-Verify system in accordance with the terms governing use of the system to confirm the employment eligibility of:

- 1) All persons employed by the vendor during the term of the contract to perform employment duties within Lake County; and
- 2) All persons, including subcontractors, assigned by the vendor to perform work pursuant to the contract.

Section 1.30: Trade-In Allowances

It is hereby understood that if the County wishes to trade in existing equipment in exchange for the new equipment specified in this solicitation, a trade-in allowance shall be quoted by the contractor and applied to the purchase cost of any apparatus ordered by issuance of a purchase order. Apparatus being used for trade in may be inspected by contacting Chief John Dickerson at 352.343.9458 for an appointment. The trade-in equipment shall be removed from the County premises at no cost to the County.

Section 1.31: Training Program

The vendor shall provide sufficient comprehensive operator training program for the Lake County Public Safety employees regarding the use of the fire apparatus supplied by the vendor in conjunction with this solicitation. The vendor shall bear all costs of manuals and texts, or other instructional materials associated with the required training.

Section 1.32: Training Manuals to be provided

The vendor shall supply the county with a minimum of three (3) comprehensive training manuals which describe the appropriate use of the equipment purchased by the County in conjunction with this solicitation. The manuals shall be supplied prior to, or upon, delivery of the equipment. Final payment shall be withheld until such time as these manuals are received by the County.

Section 1.33: Vehicle Documents

The contractor shall deliver all necessary documentation required for licensing the furnished apparatus to Lake County Fleet Management Division, 20423 Independence Boulevard, Groveland, FL, 34736.

Vehicles shall be titled:

Board of County Commissioners
Lake County, Florida
PO Box 7800
315 W Main St
Tavares, Florida 32778-7800

Bid prices shall include the cost of vehicle titles. Titling procedures shall be in accordance with the rules and regulation of the Department of Highway Safety and Motor Vehicles which require the contractor to obtain title for the purchaser.

Units shall be delivered with each of the following documents completed:

1. Statement of origin
2. Warrant certificates (including rust proofing warranty)
3. Copy of pre-delivery service report
4. Copy of manufacturers invoice to dealer, price may be deleted
5. Application for certification of title and/or vehicle registration
6. Check for title
7. Temporary tag and 20 day extension tag
8. Any additional documentation that may be required at no additional costs

Section 1.34: Public Records

Pursuant to Section 119.0701, Florida Statutes, the awarded contractor shall comply with the Florida Public Records' laws, and shall:

- 1) Keep and maintain public records that ordinarily and necessarily would be required by the County in order to perform the services identified herein.
- 2) Provide the public with access to public records on the same terms and conditions that the County would provide the records and at a cost that does not exceed the cost provided for by law.

- 3) Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law.
- 4) Meet all requirements for retaining public records and transfer, at no cost, to the County all public records in possession of the contractor upon termination of the contract and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the County in a format that is compatible with the information technology systems of the County.

Failure to comply with this section shall be deemed a breach of the contract and enforceable as set forth in Section 119.0701, Florida Statutes.

SCOPE / SPECIFICATIONS

The purpose of this solicitation is to establish a contract with a single bidder for: (1) an initial purchase of the fire apparatus specified in the Pricing Section and, (2) to provide for an indefinite quantity contract with the awarded contractor for future purchases of various hereto specified and unspecified fire apparatus.

Only apparatus proposed from companies which are actively engaged in manufacturing apparatus comparable and have been in the business for a minimum of fifteen years with an established favorable reputation shall be considered.

Items that may be purchased under resulting contract include:

- Aerial Vehicle and all associated Vehicular Apparatus
- Pumper Fire Vehicle and all associated Vehicular Apparatus
- Heavy Rescue/Mobile Command Vehicle and all associated Vehicular Apparatus
- Pumper/Tender Vehicle and all associated Vehicular Apparatus
- Water Tender Vehicle and all associated Vehicular Apparatus
- Wildland Interface Vehicle and all associated Vehicular Apparatus
- Mini and Midi Pumper Vehicle and all associated Vehicular Apparatus

CONTRACT ACCESS REMITTANCE

A one-half percent (0.5%) contract access remittance shall be provided to Lake County for other public entities and/or special fire districts that access the resulting contract. A quarterly report will be provided by the awarded contractor showing entities that have accessed the contract, along with their respective anticipated delivery dates. Lake County invoice reductions would be based solely on apparatus deliveries that were completed and had been paid for by the other entity or district. Upon termination of the contract, any unpaid access fees would be settled by cash remittance (check) once the units had been delivered.

GENERAL

It is the intent of these specifications to describe the furnishings and delivery to the County, a complete fire apparatus (hereafter "apparatus") equipped as specified herein. These specifications cover specific requirements as to the type of construction and tests the apparatus must conform, together with certain details as to finish, material preferences, equipment and appliances with which the successful bidder shall conform.

Apparatus furnished under this contract shall be built for the US market.

The design of the apparatus shall embody the latest approved automotive design practices. The workmanship shall be of the highest quality in its respective field. Construction shall be heavy duty and ample safety factors must be provided to carry loads as specified. The construction method employed shall allow ready removal of any component for service or repair.

The apparatus shall conform to the National Fire Protection Association Standard for Automotive Fire Apparatus, in its most recent edition, unless otherwise specified in this document. Only the specified firefighting support equipment listed in these specifications shall be provided.

The apparatus shall further conform to all Federal Motor Vehicles Safety Standards.

Each bidder shall furnish satisfactory evidence of their ability to design; engineer and construct the apparatus specified and shall state the location of the factory producing the apparatus. They shall also substantiate they are in a position to render prompt and proper service and to furnish replacement parts for the apparatus.

An all aluminum body per specifications is required. The body shall be extruded construction design. Formed plate construction is not acceptable.

Aluminum bodies mounted on steel sub-frames are not acceptable. To eliminate mixture of dissimilar metal, only aluminum sub-frames shall be considered.

All aerial devices shall have certified Type 1 aerial testing. Custom cabs shall be certified through a third part crash test program.

The County requires that a representative of the contractor attend a Pre-Construction Conference to finalize technical specifications for each type model to be purchased. The Director of Public Safety shall confer with the Contractor to schedule a date for each conference. A final pre-production drawing of the apparatus shall be prepared by the Contractor and be approved by the County prior to construction commencing. This drawing shall become part of the total contract and it shall show, but not limited to, such items as the chassis being utilized; lights; horns; sirens; compartment location and dimensions; etc. Print is to be a visual interpretation of the apparatus to be built. One copy of the final drawing shall be left with the Department of Public Safety and one copy shall be given to the Office of Procurement Services for record retention.

Each bid shall be accompanied by a set of detailed specifications consisting of a detailed description of the apparatus and equipment proposed. All bid proposal specifications shall be in the same sequence as the advertised specification for ease of comparison. These specifications shall include size, location, type and model of all component parts being furnished. Detailed information shall be provided on the materials used to construct all facets of the apparatus body.

The bidder shall include as part of their bid a list of recommended OEM replacement parts and optional equipment to include guaranteed delivery time (standard and emergency) guaranteed pricing or price structure and/or discount terms to apply.

The bidder shall be able to supply ninety percent (90%) of parts required to maintain this equipment within 24 hours and have access to the remaining ten percent (10%) of parts within 72 hours.

The bidder shall supply upon request original manufacturer part numbers crossover for parts which are not manufactured by the equipment manufacturer after the award of contract and prior to delivery of equipment.

The bidder shall include as part of their bid suggested stocking levels of replacement parts (See Attachment A).

On line parts ordering systems are preferred. Demonstrations and a recommended parts inventory list may be required.

Documentation provided at the time of delivery shall also include an apparatus safety video, in DVD format. This video shall address key safety considerations for personnel to follow when they are driving, operating, and maintaining the apparatus. Safety procedures for the following shall be included: vehicle pre-trip inspection, chassis operation, pump operation, and maintenance.

The pump shall be tested, approved and certified by an independent third party testing agency at the manufacturer's expense.

The County shall not be held liable for costs associated with Change orders for which they are not properly notified.

The contractor shall notify the County, in writing, of any changes on any apparatus ordered. All change orders shall be approved by the Department of Public Safety's Director **prior** to work being performed.

Written change order requests shall include:

1. Changes to be made (i.e.; chassis and/or chassis components; equipment and/or equipment components
2. Any additional time associated with changes
3. Any additional costs associated with changes

The County reserves the right to make minor changes to the awarded bid apparatus prior to ordering.

The awarded contractor shall provide all transportation, lodging and meals for up to three (3) County employees which are reasonable and in accordance with County policy to travel to the contractors manufacturing facilities where the apparatus shall be constructed for a total of two (2) nights minimum per trip if said facility is out of the State of Florida or more than two hundred fifty (250) miles from Tavares, Florida. Commercial air travel is the preferred method of transportation round trip from the Orlando International Airport. The County will coordinate with the awarded Contractor at least three weeks prior to a scheduled visit.

The County visits shall be:

1. A preconstruction meeting required to completely review the specifications and the drawings prior to the apparatus assembly/construction assembly.
2. Final inspection/performance test. The apparatus shall be 100% complete and ready for delivery. The County shall perform a final inspection and full performance test of the apparatus and all integral systems. The Contractor shall provide technical information and authorized representatives to allow for a complete and thorough conformance meeting inspection. All third part certifications shall be available for review at this meeting.
3. Additional trips may be required to the apparatus fails to be ready and in compliance at the expense of the Contractor with no additional costs to the County.

A road test shall be conducted with the apparatus full loaded and a continuous run of ten (10) or more miles will be made under all driving conditions, during which time the apparatus shall show no loss of power or overheating. The transmission drive shaft or shafts, and rear axles shall run quietly and be free from abnormal vibration or noise throughout the operating range of the apparatus.

Vehicle shall adhere to the following parameters:

1. The front to rear weight distribution of the full loaded vehicle (as defined by applicable NFPA guidelines) shall be within the limits set by the chassis manufacturer. The front axle load shall not be less than the minimum axle loads specified by the chassis manufacturer, under full load and all other loading conditions.
2. The apparatus shall be capable of accelerating to thirty five (35) mph from a standing start within twenty five (25) seconds on a level concrete highway without exceeding the maximum governed rpm of the engine.
3. The service brakes shall be capable for stopping the fully loaded vehicle in thirty five (35) feet at twenty (20) mph on level concrete highway.
4. The apparatus, fully loaded, shall be capable of obtaining a speed of 60 mph on a level concrete highway with the engine not exceeding its governed rpm.

In the event the apparatus fails to meet the test requirements of these specifications on the first trial, second trials may be conducted at the request of the contractor and the approval of the County within thirty (30) days of the date of the first trials. Such trials shall be final and conclusive and failure to comply with these requirements shall be cause for rejection. Failure to comply with changes as the County may consider necessary to conform to any clause of the specifications with thirty (30) days after notice is given to the contractor of such changes shall also be cause for rejection of the apparatus. Permission to keep or store the apparatus in any building owned or occupied by the County or its use by the County during the above specified period with the permission of the contractor shall not constitute acceptance.

DETAIL SPECIFICATIONS FOR A TRIPLE COMBINATION PUMPER

If it is necessary to bid alternate equipment or to take exceptions to specification requirements, this must be so stated in your bid. For each item, please place a **Y- (Yes) or N-(No)** in the appropriate space to signify whether or not you are in complete compliance with the specification. Failure to follow the format or answer the specification may cause your bid to be disqualified. If you need extra space to describe your product, please feel free to attach extra sheets. When doing this, be sure your description references the appropriate title and page number.

NOTE: Brand names are intended to be descriptive and not restrictive, and are included to indicate the quality and characteristics of the product or service that will be acceptable. If offering an alternate product, please note that alternate product or service descriptive materials must be submitted with the Bid for the County to determine if the product or service offered meets the required specification.

CHASSIS

The chassis shall be a Freightliner FL-106

Comply: (Y/N) Y

SEATING CAPACITY

The seating capacity in the cab shall be five (5).

Comply: (Y/N) Y

WHEELBASE

The wheelbase of the vehicle shall be no greater than 246 inches.

Comply: (Y/N) Y

GVW RATING

The gross vehicle weight rating shall be a minimum of 40,600 pounds.

Comply: (Y/N) Y

FRAME

The frame rails shall be formed from 120,000 psi yield, heat treated alloy steel.

Comply: (Y/N) Y

FRONT AXLE

Front axle, Meritor, 16,000 pounds. Shall be Freightliner M2-106/112 4 X 2 ground rating capacity of 16,000 pounds.

Comply: (Y/N) Y

FRONT SUSPENSION

Spring Mounted: 8-Leaf, 54.00" x 4.00"

Comply: (Y/N) Y

Capacity at ground (2 springs): 14,660 pounds.

Comply: (Y/N) Y

Shock Absorbers: Double Acting

Comply: (Y/N) Y

Shock absorbers shall be provided on the front axle.

Comply: (Y/N) Y

REAR AXLE

Rear axle, Meritor RS, Freightliner 26,000 pounds.

Comply: (Y/N) Y

The brake chambers shall be forward mounted and brakes shall be 16.50" x 7.00", S-Cam type.

Comply: (Y/N) Y

PARKING BRAKE

The parking brake shall be spring set and located on the rear axle service brake.

Comply: (Y/N) Y

REAR AXLE RATIO

The ratio of the rear axle shall be provided by the chassis manufacturer. The maximum top speed shall be in accordance with NFPA 1901.

Comply: (Y/N) Y

REAR SUSPENSION

The rear suspension shall be a Hendrickson spring mounted, 14-leaf with a capacity at ground of 31,000 pounds.

Comply: (Y/N) N

Auxiliaries shall be included and the deflection rate shall be variable.

Comply: (Y/N) Y

DUST SHIELDS

The front and rear brakes shall be provided with dust shields.

Comply: (Y/N) Y

ANTI-LOCK BRAKE SYSTEM

The vehicle shall be equipped with an anti-lock braking system. The ABS shall provide anti-lock braking control on both the front and rear wheels. It is to be a digitally controlled system that utilizes microprocessor technology to control the anti-lock braking system. Each wheel is to be monitored by the system. When any particular wheel begins to lockup, a signal is to be sent to the control unit. This control unit then shall reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system shall eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.

Comply: (Y/N) Y

FRONT BRAKES

The front brakes shall be S-Cam, 16.50" x 6.00".

Comply: (Y/N) Y

EXHAUST BRAKE

An exhaust brake with an integral variable geometry turbo (VGT) style, Freightliner with Cummins will be provided. The control will be located on instrument panel within easy reach of the driver.

Comply: (Y/N) Y

AIR COMPRESSOR, BRAKE SYSTEM

The air compressor shall be a Wabco Cummins with 18.7 cubic feet per minute output.

Comply: (Y/N) Y

AIR DRYER

A Bendix AD-IP air dryer with a heater shall be provided.

Comply: (Y/N) Y

AIR INLET

A single air inlet with male coupling shall be provided. It shall allow station air to be supplied to

the apparatus brake system through a shoreline hose. The inlet shall be located on the driver side of pump panel. A check valve shall be female coupling shall also be provided with the loose equipment. Comply: (Y/N) Y

AIR OUTLET

One (1) air outlet shall be installed with a female coupling and shut off valve, located on the driver side of pump panel. This system shall tie into the "wet" tank of the brake system and include an 85 psi pressure protection valve in the outlet line to prevent the brake system from losing all air. Comply: (Y/N) Y

A mating male fitting shall be provided with the loose equipment. Comply: (Y/N) Y

AIR TANK, ADDITIONAL

An additional air tank with 1454 cubic inch displacement shall be provided to increase the capacity of the main air brake system. This tank shall be plumbed into the rear half of the brake system. Comply: (Y/N) Y

The output flow of the engine air compressor shall vary with engine rpm. Full compressor output shall only be achieved at governed engine speed. Engine speed shall be limited by generators, pumps and other PTO driven options. Comply: (Y/N) Y

ENGINE

- Model: Cummins Comply: (Y/N) Y
- Number of Cylinders: Six (6) Comply: (Y/N) Y
- Bore and Stroke: 4.49" x 5.31" Comply: (Y/N) Y
- Displacement: 506 cubic inches Comply: (Y/N) Y
- Compression Ratio: 16.60:1 Comply: (Y/N) Y
- Rated Brake Horsepower: 350 at 2000 rpm Comply: (Y/N) Y
- Peak Torque: 1000 at 1400 rpm Comply: (Y/N) Y
- Governed rpm: 2200 Comply: (Y/N) Y
- Turbocharger Comply: (Y/N) Y
- Charge Air Cooled Comply: (Y/N) Y
- Combustion System: Hydraulically actuated electronically controlled unit injectors (HEUI) Comply: (Y/N) Y

ENGINE ACCESSORIES

- Fan Clutch: Electric with nylon fan
- Air Cleaner: Dry type, with restriction indicator in cab
- Fuel Filters: Dual, with check valve
- Governor: Limiting speed type
- Lube Oil Cooler
- Lube Oil Filter: Full flow
- Starting Motor: 12-volt
- Oil Fill and Level Gauge
- Hand Operated, Re-prime Pump

Comply: (Y/N) Y

Comply: (Y/N) Y

Comply: (Y/N) Y

Comply: (Y/N) Y

Comply: (Y/N) Y

Comply: (Y/N) Y

Comply: (Y/N) Y

Comply: (Y/N) Y

Comply: (Y/N) Y

ENGINE INSTALLATION CERTIFICATION

The fire apparatus manufacturer shall provide, at the time of bid, a letter from the engine manufacturer stating they approve of the engine installation in the bidder's chassis. The approval of the engine installation shall be at full horsepower rating in a continuous duty application under all operating conditions, including road and pump. No type of automatic horsepower reduction feature shall be allowed.

Comply: (Y/N) Y

There shall be no exception to any portion of the engine installation certification. Nonconformance shall lead to immediate rejection of bid.

Comply: (Y/N) Y

RADIATOR

- Pressurized System, Tube, and Fin
- Deaeration Tank and Sight Glass
- Anti-Freeze Protection to -30 Degrees Fahrenheit

Comply: (Y/N) Y

Comply: (Y/N) Y

Comply: (Y/N) Y

AIR INTAKE, w/EMBER SEPARATOR

The air inlet shall be equipped with a stainless steel mesh to separate water and burning embers from the air intake system such that particulate matter larger than 0.039 in. (1.0 mm) in diameter cannot reach the air filter element.

Comply: (Y/N) Y

This shall be in compliance with NFPA 1901 and 1906 standards.

Comply: (Y/N) Y

EXHAUST SYSTEM

The exhaust system shall include a diesel particulate filter (DPF) and a selective catalytic reduction (SCR) device to meet current EPA standards. The DPF shall be mounted horizontally

outside of the frame rails in the passenger side front step. The exhaust shall terminate with horizontal tailpipe and diffuser ahead of passenger side rear wheels. Comply: (Y/N) Y

A heat deflector shield shall be provided where the tailpipe is routed under any side compartmentation. Comply: (Y/N) Y

FUEL/WATER SEPARATOR

An Alliance fuel/water separator shall be provided on the chassis.

Comply: (Y/N) Y

FUEL PRIMER PUMP

Fuel primer pump will be included with the fuel/water separator.

Comply: (Y/N) Y

HIGH IDLE

A high idle switch shall be provided, inside the cab, on the instrument panel, that shall automatically maintain a preset engine rpm. A switch shall be installed, at the cab instrument panel, for activation/deactivation. Comply: (Y/N) Y

The high idle shall be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light shall be provided, adjacent to the switch. The light shall illuminate when the above conditions are met. The light shall be labeled "OK to Engage High Idle". Comply: (Y/N) Y

COOLANT LINES

All hoses shall be Silicone used for coolant lines installed by the chassis manufacturer. They shall include the following:

- Cab Heater Hose (outside cab only)

Comply: (Y/N) N

Hose clamps shall be "constant torque type" to prevent coolant leakage. They shall react to temperature changes in the cooling system and expand or contract accordingly while maintaining a constant clamping pressure on the hose. Comply: (Y/N) Y

FUEL TANK

A 70-gallon fuel tank shall be provided and mounted at the right-hand cab step. The tank shall be constructed of welded steel. Comply: (Y/N) N

TRANSMISSION

An Allison, model 3000 EVS, electronic torque converting automatic transmission shall be provided. **Programmed in Performance Mode** Comply: (Y/N) Y

Two (2) PTO openings shall be located on left side and top of converter housing (positions 8 o'clock and 4 o'clock). Comply: (Y/N) Y

A transmission temperature gauge or warning light shall be installed on cab instrument panel.

Comply: (Y/N) Y

TRANSMISSION SHIFT CONTROL

A push button shift module shall be mounted to right of driver. Shift position indicator shall be indirectly lit for after dark operation. Comply: (Y/N) Y

The transmission shall be a 5 speed. The transmission ratio's shall be 1st - 3.49 to 1.00, 2nd - 1.86 to 1.00, 3rd - 1.41 to 1.00, 4th - 1.00 to 1.00, 5th - 0.75 to 1.00, R - 5.03 to 1.00.

Comply: (Y/N) Y

TRANSMISSION COOLER

A transmission oil cooler shall be provided in the lower tank of the radiator.

Comply: (Y/N) Y

DRIVELINE

Drivelines shall be a heavy duty metal tube equipped with universal joints properly sized for the application. A splined slip joint shall be provided in each driveshaft. Comply: (Y/N) Y

STEERING

Steering shall consist of a hydraulically driven Sheppard, model M100, steering system. Comply: (Y/N) Y

The steering wheel shall have an 18.00" diameter and also tilt feature. Comply: (Y/N) Y

TIRES, FRONT

Front tires shall be Goodyear 12R22.50, radial highway tread with a capacity of 14,780 pounds.

Comply: (Y/N) Y

WHEELS, FRONT

Wheels for the front axle shall be 22.50" x 8.25" aluminum disc, ten (10)-hole pattern. Comply: (Y/N) Y

TIRES, REAR

Rear tires shall be Goodyear 12R22.50 XZY3, 16-ply traction tread. Tires shall meet or exceed the weight rating of the axle and/or suspension. Comply: (Y/N) Y

WHEELS, REAR

The rear wheels shall be 22.50" x 8.25" aluminum disc with a ten (10)-hole pattern. Comply: (Y/N) Y

WHEEL CHOCKS

There shall be one (1) set of folding Ziamatic SAC-44-E, aluminum alloy, Quick-Choc wheel blocks with easy-grip handle and SQCH-44-H horizontal mounting brackets provided. The chocks shall be mounted in the left front compartment. Comply: (Y/N) Y

MUD FLAPS

Mud flaps shall be installed behind the rear wheels of the apparatus. Comply: (Y/N) Y

CAB

Type: Four (4) Doors, High roof cab (engine forward)

Comply: (Y/N) Y

Construction: Welded Steel and Fiberglass

Comply: (Y/N) Y

Accessories:

Comply: (Y/N) Y

- Tinted Glass in all Windows
- Rubber Floor Mats, Gray in color
- Dual Sun-Visors
- 18.00" Cab Entrance Handrails - 1.28" diameter extruded aluminum with rubber inserts one (1) each side
- Dome Light with Map Light
- Fresh Air Heater and Defroster
- Fiberglass Front End, Three (3) Piece Construction
- Hood Mounted Chrome Grille
- Composite Aero Design Halogen Headlights, Chrome Bezels
- Daytime Running Lights
- Air Ride Cab Suspension
- Gray Vinyl Upholstery

CAB ACCESS STEPS

The left-hand cab step shall be provided by the apparatus manufacturer. The left-hand cab step shall be a two (2) step design fabricated from bright aluminum tread plate. The step assembly shall completely cover the batteries and air tanks. Access shall be provided to the chassis batteries.

Comply: (Y/N) Y

The right-hand cab step shall be provided by the apparatus manufacturer. The right-hand cab step shall be a two (2) step design fabricated from bright aluminum tread plate. The step assembly shall completely cover the chassis fuel tank. The fuel tank fill cap shall be exposed for refueling.

Comply: (Y/N) Y**COMPARTMENT, STORAGE**

A storage compartment shall be provided under the crew cab in both the left side and right side step areas. An aluminum tread plate drop-down door with a rubber seal shall be provided on the compartment. The door shall have a single pan construction.

Comply: (Y/N) Y

MIRRORS

West Coast Style heated, remote operated mirrors constructed from a molded composite material with a bright finish will be provided. A heated 8.00" convex mirror shall be included below the primary mirrors. An auxiliary down view mirror shall be included on the passenger side.

Comply: (Y/N) Y

BUMPER

A one (1) piece, 10.00" high, stainless steel bumper, shall be attached to the front of the frame.

Comply: (Y/N) Y

A 9.00" channel shall be mounted directly behind the bumper for additional strength.

Comply: (Y/N) Y

The bumper shall be extended 16.00" from front face of cab.

Comply: (Y/N) Y

HOSE TRAY

A hose tray, constructed of aluminum, shall be placed in the center of the bumper extension.

Comply: (Y/N) Y

The tray shall have a capacity of 100' of 1.75" double jacket cotton-polyester hose.

Comply: (Y/N) Y

Black rubber grating shall be provided at the bottom of the tray. Drain holes are also provided.

Comply: (Y/N) Y

GRAVEL PAN

A gravel pan, constructed of bright aluminum tread plate, shall be furnished between the bumper and cab face.

Comply: (Y/N) Y

The gravel pan shall be properly supported from the underside to prevent flexing and vibration of the aluminum tread plate.

Comply: (Y/N) Y

HOSE HOLD DOWN STRAP

One (1) hose trays shall have a pair of 1.875" wide black nylon strap(s), with Velcro fasteners, provided. The strap(s) shall be used to secure the hose in the tray.

Comply: (Y/N) Y

TOW HOOKS

Two (2) chromed steel tow hooks shall be installed under the bumper and attached to the front frame members. The tow hooks shall be designed and positioned to allow up to a 6,000 pound straight horizontal pull in line with the centerline of the vehicle. The tow hooks shall not be used for lifting of the apparatus.

Comply: (Y/N) Y

SEATING

Seating inside the cab shall consist of an air-ride driver seat and a Seats Inc. 911, SCBA officer seat.

Comply: (Y/N) Y

SEATING (crew cab)

Three (3) individual, Seats Inc. 911, SCBA style seats shall be provided. Comply: (Y/N) Y

AIR BOTTLE HOLDERS

A Ziamatic model ULLH SCBA holder shall be mounted in the back rest of the SCBA seat. This bracket shall be compliant with NFPA 1901-04 Section 14.1.10.1 and shall include a back plate, two seats, a footplate and the model LLS ("Load & Lock") strap to hold the bottle in the bracket. The bracket seats shall be a "one size fits all" style seat and shall accommodate SCBA cylinders from the high pressure 30-minute to the high pressure 60-minute. Seats shall be adjustable up and down by unbolting, relocating, and rebolting in the desired position. There shall be a quantity of three (3). Comply: (Y/N) Y

ENGINE COMPARTMENT LIGHTS

Two (2) engine compartment lights shall be installed under the engine hood, of which the switches are an integral part. Comply: (Y/N) Y

STEP LIGHTS

There shall be eight (8) Ri-Tar, Model M27, clear LED step lights provided. There shall be two (2) lights installed at each cab and crew cab door, one (1) light per doorstep. The lights shall be activated when the adjacent door is opened. Comply: (Y/N) Y

AIR CONDITIONING

An air conditioner shall be provided that is integral with heater and defroster system. In addition, another evaporator core shall be provided for more cooling capacity in the crew cab. Auxiliary air conditioner shall be provided for rear area of cab. Comply: (Y/N) Y

The system shall deliver a 12,000 BTU/hour in the air conditioning mode when tested per SAE J1484 with inlet air conditions of 80 degrees F. dry bulb and 67 degrees F. wet bulb. Comply: (Y/N) Y

Includes Hydrofluorocarbon HFC-134A refrigerant Comply: (Y/N) Y

CAB INSTRUMENTS

- Engine Temperature Gauge and Warning Buzzer Comply: (Y/N) Y

- Engine Oil Pressure Gauge and Warning Buzzer Comply: (Y/N) Y

- Speedometer with Odometer Comply: (Y/N) Y

- Engine Tachometer Comply: (Y/N) Y

- Engine Hour meter Comply: (Y/N) Y

- Fuel Level Gauge Comply: (Y/N) Y

- Voltmeter: Low voltage red warning light and audible alarm Comply: (Y/N) Y

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- Air Brake Pressure Gauge Comply: (Y/N) Y
- Air Restriction Indicator Comply: (Y/N) Y
- Circuit Breakers: For overload protection of electric circuits Comply: (Y/N) Y
- Ignition Switch: Keyless type Comply: (Y/N) Y
- Windshield Wiper Control with intermittent feature Comply: (Y/N) Y
- Windshield Washer Controls Comply: (Y/N) Y

STORAGE CONSOLE

There shall be a console located between the front seats, with room for emergency switches and map storage. There shall be an area approximately 8.50" x 21.75" for switching, pump shift and siren. There shall be four sections for map storage. Each section shall be approximately 5.00" wide x 13.00" long x 12.25" deep. The console shall be constructed of smooth aluminum and painted black.

Comply: (Y/N) Y

BATTERY SYSTEM

A single starting battery system shall be provided consisting of three (3)-12 volt, 700 CCA, maintenance-free, group 31 batteries.

Comply: (Y/N) Y

The batteries system shall have a total of 2100 CCA with a minimum reserve capacity of 540 minutes.

Comply: (Y/N) Y

MASTER BATTERY SWITCH

A master battery switch, to activate the battery system, shall be provided inside the cab within easy reach of the driver.

Comply: (Y/N) Y

The master battery disconnect switch shall be wired between the starter solenoid and the remainder of the electrical loads on the apparatus.

Comply: (Y/N) Y

A green "battery on" indicator light, visible from the driver's position shall be provided.

Comply: (Y/N) Y

BATTERY CHARGER/ AIR COMPRESSOR

A Kussmaul Pump Plus 1200 single output battery charger/air compressor system shall be provided. A bar graph display indicating the state of the battery charge shall be mounted on the driver's side pump panel.

Comply: (Y/N) Y

The automatic charger shall maintain a single battery system with a maximum output current of 40 amps.

Comply: (Y/N) Y

The 12-volt air compressor shall be provided to maintain the air system pressure when the vehicle is not in use. A selector switch shall be provided on the charger to operate the air compressor either as a DC compressor or as an AC compressor. If the selector switch is in the DC position the compressor shall operate whenever the pressure switch senses low system

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pressure, however if in the AC position the shoreline inlet must be plugged in before the compressor shall operate. Comply: (Y/N) Y

The battery charger/compressor shall be wired to the 120-volt shoreline to activate automatically when power is connected. The shoreline shall be installed on the driver's side pump panel. Comply: (Y/N) Y

Battery charger/compressor shall be located in the front left body compartment and shall be covered in aluminum for protection. Comply: (Y/N) Y

KUSSMAUL AUTO EJECT FOR SHORELINE

One (1) shoreline receptacle shall be provided to operate the dedicated 120-volt circuits on the truck without the use of the generator. Comply: (Y/N) Y

The shoreline receptacle (s) shall be provided with a NEMA 5-20, 120 volt, 20-amp, straight blade Kussmaul auto eject plug with a yellow weatherproof cover. The cover is spring loaded to close, preventing water from entering when the shoreline is not connected. Comply: (Y/N) Y

A solenoid wired to the vehicle's starter is energized when the engine is started. This instantaneously drives the plug from the receptacle. Comply: (Y/N) Y

The shoreline shall be connected to the on-board battery charger. Comply: (Y/N) Y

A mating connector body shall also be supplied with the loose equipment. Comply: (Y/N) Y

The shoreline receptacle shall be located on the driver side of pump panel. Comply: (Y/N) Y

ELECTRICAL SYSTEM

Alternator: Delco Remy 40SI quadra-mount, with remote battery voltage sensor and capacity of 12-volt 275 amperes. Comply: (Y/N) Y

The alternator shall be provided with a 2.40" diameter pulley. Comply: (Y/N) Y

The pulley shall increase alternator output at engine idle, allowing the apparatus to meet or exceed current N. F. P. A. 1901 testing. Comply: (Y/N) Y

ELECTRICAL WIRING DIAGRAMS

Two (2) electrical wiring diagrams, prepared for the model of chassis and body, shall be provided. Comply: (Y/N) Y

RADIO ANTENNA MOUNT

An antenna mounting base, Model MA with 17 feet of coax cable and weatherproof cap shall be provided for a two way radio. The mount shall be located on the cab roof just to the rear of the front cab seats. The cable shall be routed to center console, with enough cable for the customer

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to route to the instrument panel twelve (12) inches minimum from the light bar if needed.
Comply: (Y/N) Y

Two (2) shall be provided.

Comply: (Y/N) Y

SPARE CIRCUIT

There shall be two (2) pair of wires installed.

Comply: (Y/N) Y

The above wires shall have the following features:

Wires shall be connected directly to the ignition switched power.

Wires shall be protected to 15 amps.

Power and ground shall end on the center console.

Termination shall be with 15-amp, power point fuse blocks.

Wires shall be sized to 125% of the protection.

Comply: (Y/N) Y

CUSTOMER RADIO WIRING

There shall be two (2) 12 volt combination wiring leads of which each shall include, one (1) battery switched, one (1) ignition and one (1) negative, for use with radio equipment. Each lead shall be 18" long and be provided at the center console. The leads shall be clearly marked and in a coil. A breaker rated for 30 amps shall be provided for circuit protection of the battery switched lead with a minimum of 10 gauge wire. The ignition lead is for sensing purposes only.

The wires shall be colored coded as follows:

-red for battery switched

-yellow for ignition

-black for ground

Comply: (Y/N) Y

ELECTRONIC LOAD MANAGEMENT

A Kussmaul Load Manager 2 shall be provided on the apparatus. The device is an electronic load management (ELM) system that monitors the vehicles 12-volt electrical system, and automatically reduces the electrical load in the event of a low voltage condition and by doing so, ensures the integrity of the electrical system.

Comply: (Y/N) Y

The ELM shall monitor the vehicle's voltage while at the scene (parking brake applied). It shall sequentially shut down individual electrical loads when the system voltage drops below a preset value. Two (2) separate electrical loads shall be controlled by the load manager. The ELM shall sequentially re-energize electrical loads as the system voltage recovers. Comply: (Y/N) Y

AMP DRAW REPORT

The bidder shall provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.

Comply: (Y/N) Y

The manufacturer of the apparatus shall provide the following:

1) Documentation of the electrical system performance tests.

2) A written load analysis, which shall include the following:

A) The nameplate rating of the alternator.

Comply: (Y/N) Y

B) The alternator rating under the conditions specified per:
Applicable NFPA 1901 or 1906 (Current Edition).

C) The minimum continuous load of each component that is specified per:
Applicable NFPA 1901 or 1906 (Current Edition).

D) Additional loads that, when added to the minimum continuous load, determine the total connected load.

E) Each individual intermittent load.

All of the above listed items shall be provided by the bidder per the applicable NFPA 1901 or 1906 (Current Edition).
Comply: (Y/N) Y

EXTERIOR LIGHTING

Exterior lighting shall meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements in effect at time of proposal.
Comply: (Y/N) Y

Front headlights shall be halogen type and comply with all FMVSS requirements.

Comply: (Y/N) Y

Five (5) clearance and marker lights shall be installed across the leading edge of the cab.

Comply: (Y/N) Y

WARNING LIGHTS (Cab Face)

A pair of flush mounted, Whelen model 60*02F*R, flashing Super LED lights shall be provided on the cab face.
Comply: (Y/N) Y

The color of these lights shall be red Super LED/red lens.

Comply: (Y/N) Y

These lights shall meet or exceed the NFPA required optical light output for the front lower zone.
Comply: (Y/N) Y

A switch shall be provided inside the cab on the switch panel for actuation.

Comply: (Y/N) Y

These lights shall be installed with a flange.

Comply: (Y/N) Y

BACK-UP ALARM

An ECCO, Model SA917-PM2, solid state electronic audible back-up alarm that actuates when the truck is shifted into reverse shall be provided. The device shall sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum five (5) dba above surrounding environmental noise levels.
Comply: (Y/N) Y

WATER TANK

Booster tank shall have a capacity of 1000 gallons and be constructed of polypropylene plastic by United Plastic Fabricating, Incorporated.

Comply: (Y/N) Y

Tank joints and seams shall be nitrogen welded inside and out.

Comply: (Y/N) Y

Tank shall be baffled in accordance with NFPA Bulletin 1901 requirements.

Comply: (Y/N) Y

Baffles shall have vent openings at both the top and bottom to permit movement of air and water between compartments.

Comply: (Y/N) Y

Longitudinal partitions shall be constructed of .38" polypropylene plastic and shall extend from the bottom of the tank through the top cover to allow for positive welding.

Comply: (Y/N) Y

Transverse partitions shall extend from 4.00" off the bottom of the tank to the underside of the top cover.

Comply: (Y/N) Y

All partitions shall interlock and shall be welded to the tank bottom and sides.

Comply: (Y/N) Y

Tank top shall be constructed of .50" polypropylene. It shall be recessed .38" and shall be welded to the tank sides and the longitudinal partitions.

Comply: (Y/N) Y

Tank top shall be sufficiently supported to keep it rigid during fast filling conditions.

Comply: (Y/N) Y

Construction shall include 2.00" polypropylene dowels spaced no more than 30.00" apart and welded to the transverse partitions. Two (2) of the dowels shall be drilled and tapped (.50" diameter, 13.00" deep) to accommodate lifting eyes.

Comply: (Y/N) Y

A sump that is 8.00" long x 8.00" wide x 6.00" deep shall be provided at the bottom of the water tank.

Comply: (Y/N) Y

Sump shall include a drain plug and the tank outlet.

Comply: (Y/N) Y

Tank shall be installed in a fabricated cradle assembly constructed of structural steel.

Comply: (Y/N) Y

Sufficient crossmembers shall be provided to properly support bottom of tank. Crossmembers shall be constructed of steel bar channel or rectangular tubing.

Comply: (Y/N) Y

Tank shall "float" in cradle to avoid torsional stress caused by chassis frame flexing. Rubber cushions, .50" thick x 3.00" wide, shall be placed on all horizontal surfaces that the tank rests on.

Comply: (Y/N) Y

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Stops or other provision shall be provided to prevent an empty tank from bouncing excessively while moving vehicle. Comply: (Y/N) Y

Mounting system shall be approved by the tank manufacturer. Comply: (Y/N) Y

Fill tower shall be constructed of .50" polypropylene and shall be a minimum of 8.00" wide x 14.00" long. Comply: (Y/N) Y

Fill tower shall be furnished with a .25" thick polypropylene screen and a hinged cover. Comply: (Y/N) Y

An overflow pipe, constructed of 4.00" schedule 40 polypropylene, shall be installed approximately halfway down the fill tower and extend through the water tank and exit to the rear of the rear axle. Comply: (Y/N) Y

HOSE BED

The hose body shall be fabricated of aluminum. Comply: (Y/N) Y

Hose body width shall be a minimum of 68.00" inside. Comply: (Y/N) Y

Upper and rear edges of side panels shall have a double break for rigidity, a split tube finish shall not be acceptable. Comply: (Y/N) Y

The upper inside area of the beavertails shall be covered with brushed stainless steel to prevent damage to painted surface when hose is removed. Comply: (Y/N) Y

Flooring of the hose bed shall be removable aluminum grating with the top surface corrugated to aid in hose acration. The grating slats shall have spacing between the slats for hose ventilation. Comply: (Y/N) Y

Hose bed shall accommodate 400' of 3" DJ, and 1000' of 5" LDH. Comply: (Y/N) Y

One (1) adjustable hosebed divider shall be furnished for separating hose. Comply: (Y/N) Y

Each divider shall be constructed of aluminum sheet. Comply: (Y/N) Y

Each divider shall be fully adjustable by sliding in tracks, located at the front and rear of the hose bed. It shall be held in place by tightening bolts at each end. Comply: (Y/N) Y

Acorn nuts shall be installed on all bolts in the hose bed which have exposed threads. Comply: (Y/N) Y

Flat surfaces shall be sanded for uniform appearance, or constructed of brushed aluminum. Comply: (Y/N) Y

HOSEBED DIVIDER, SPECIAL LOCATION

A hosebed divider for separating hose shall be attached to the water tank dome.

Comply: (Y/N) Y

It shall be adjustable by sliding in tracks, located on the tank dome and rear of the hose bed. It shall be held in place by tightening bolts at each end.

Comply: (Y/N) Y

Acorn nuts shall be installed on all bolts in the hose bed which have exposed threads.

Comply: (Y/N) Y

Flat surfaces shall be sanded for uniform appearance, or constructed of brushed aluminum.

Comply: (Y/N) Y

HOSE RESTRAINT

The hose in the hosebed shall be restrained by black nylon Velcro straps at the top of the hosebed and a black nylon web strap netting at the top and rear of the hosebed. The netting shall include quick release fasteners.

Comply: (Y/N) Y

RUNNING BOARDS

Running boards shall be fabricated of .125" bright aluminum tread plate.

Comply: (Y/N) Y

Each running board shall be supported by a welded square tubing and channel assembly, which shall be bolted to the pump compartment substructure.

Comply: (Y/N) Y

Running boards shall be spaced away from the pump panel.

Comply: (Y/N) Y

A splash guard shall be provided above the running board tread plate.

Comply: (Y/N) Y

TAILBOARD

Rear step shall also be constructed of .125" bright aluminum tread plate and spaced .50" from the body, as well as supported by a structural steel assembly.

Comply: (Y/N) Y

The rear tailboard shall be 16.00" deep and 8.00" to the rear of the extended side compartments.

Comply: (Y/N) Y

The exterior side shall be flanged down and in.

Comply: (Y/N) Y

Flanges shall not be notched.

Comply: (Y/N) Y

Entire rear surface between the beavertails shall be covered with bright aluminum tread plate to protect the painted surface when removing hose.

Comply: (Y/N) Y

Inside surface of each beavertail in the hose bed area shall be covered with polished stainless steel to protect the paint finish.

Comply: (Y/N) Y

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The remaining inside surface of the heavertails shall be covered with bright aluminum tread plate.
Comply: (Y/N) Y

TOW EYES (Rear)

Two (2) tow eyes shall be installed below the rear tailboard compartment attached to frame rails.
Comply: (Y/N) Y

The tow eyes shall be properly reinforced so that the truck can be pulled from the eyes.
Comply: (Y/N) Y

COMPARTMENTATION

Body and compartments shall be fabricated of aluminum.
Comply: (Y/N) Y

Side compartments shall be an integral assembly with the rear fenders. Comply: (Y/N) Y

Circular fender liners shall be provided for prevention of rust pockets and ease of maintenance.
Comply: (Y/N) Y

Compartment flooring shall be of the sweep out design with the floor higher than the compartment door lip.
Comply: (Y/N) Y

Drip protection shall be provided above the doors by means of bright aluminum extrusion or formed bright aluminum tread plate.
Comply: (Y/N) Y

The top of the compartment shall be covered with bright aluminum tread plate rolled over the edges on the front, rear and outward side. These covers shall have the corners "TIG" welded.
Comply: (Y/N) Y

Side compartment covers shall be separate from the compartment tops. Comply: (Y/N) Y

Front facing compartment walls shall be covered with bright aluminum tread plate.
Comply: (Y/N) Y

All screws and bolts which protrude into a compartment shall have acorn nuts on the ends to prevent injury.
Comply: (Y/N) Y

AGGRESSIVE WALKING SURFACE

All exterior surfaces designated as stepping, standing, and walking areas shall comply with the required average slip resistance of NFPA section 13-7.3.
Comply: (Y/N) Y

LOUVERS

Louvers shall be stamped into compartment walls to provide the proper airflow inside the body compartments and to prevent water from dripping into the compartment. Where these louvers are provided, they shall be formed into the metal and not added to the compartment as a separate plate.
Comply: (Y/N) Y

COMPARTMENTATION, DRIVER'S SIDE

A full height, roll-up door compartment ahead of the rear wheels shall be provided. The interior dimensions of this compartment shall be approximately 44" wide x 58.25" high x 25.88" deep in the lower 26" of the compartment and 12" deep in the remaining upper portion. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be approximately 38.25" wide x 58.25" high.

Comply: (Y/N) Y

Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.

Comply: (Y/N) Y

A roll-up door compartment over the rear wheels shall be provided. The interior dimensions of this compartment shall be approximately 66.50" wide x 25.38" high x 12" deep. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The clear door opening of this compartment shall be approximately 58.25" wide x 25.12" high.

Comply: (Y/N) Y

Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.

Comply: (Y/N) Y

A full height, roll-up door compartment behind the rear wheels shall be provided. The interior dimensions of this compartment shall be approximately 47.50" wide x 58.25" high x 25" deep in the lower 26" of height and 12" deep in the remaining upper section of the compartment. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be approximately 44.75" wide x 58.25" high.

Comply: (Y/N) Y

Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.

Comply: (Y/N) Y**COMPARTMENTATION, PASSENGER'S SIDE**

A full height, roll-up door compartment ahead of the rear wheels shall be provided. The interior dimensions of this compartment shall be approximately 44" wide x 58.25" high x 25.88" deep in the lower 26.00" of the compartment and 12.00" deep in the remaining upper portion. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be approximately 38.25" wide x 58.25" high. Closing of the door shall not require releasing, unlocking, or unlatching any

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mechanism and shall easily be accomplished with one hand.

Comply: (Y/N) Y

A roll-up door compartment over the rear wheels shall be provided. The interior dimensions of this compartment shall be approximately 66.50" wide x 25.38" high x 12" deep. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The clear door opening of this compartment shall be 58.25" wide x 25.12" high. Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.

Comply: (Y/N) Y

A full height, roll-up door compartment behind the rear wheels shall be provided. The interior dimensions of this compartment shall be approximately 47.50" wide x 58.25" high x 12" deep. A section of this compartment shall be 25.88" deep x 47.50" wide x 26" high directly behind the rear wheels. The height of the compartment shall be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment shall be calculated with the compartment door closed. The compartment interior shall be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment shall be approximately 44.75" wide x 58.25" high. Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand.

Comply: (Y/N) Y

ROLL-UP DOOR, SIDE COMPARTMENTS

Roll-up doors with a finish that is painted one color to match the lower portion of the body shall be installed on the side compartments. They shall be double faced, aluminum construction. A total of six (6) compartments with painted roll-up style doors shall be provided.

Comply: (Y/N) Y

Lath sections shall be an interlocking rib design and shall be individually replaceable without complete disassembly of door.

Comply: (Y/N) Y

Between each slat at the pivoting joint shall be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals shall allow door to operate in extreme temperatures ranging from plus 180 to minus 40 degrees Fahrenheit. Side, top and bottom seals shall be provided to resist ingress of dirt and weather and be made of Santoprene

Comply: (Y/N) Y

All hinges, barrel clips and end pieces shall be nylon 66. All nylon components shall withstand temperatures from plus 300 to minus 40 degrees Fahrenheit. Hardened plastic shall not be acceptable.

Comply: (Y/N) Y

A polished stainless steel lift bar with locking key latches shall be provided for each roll-up door. The keys shall be model #1250 to match all compartment doors. The lift bar shall be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge shall be supplied over lift bar for additional area to aid in closing the door. A total of Six (6) compartment doors require this style of latch.

Comply: (Y/N) Y

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Door(s) shall be constructed from an aluminum box section. The exterior surface of each slat shall be flat. The interior surfaces shall be concave to provide strength and prevent loose equipment from jamming the door from inside. Comply: (Y/N) Y

To conserve space in the compartment(s), the spring roller assembly shall not exceed 3.00" in diameter. Comply: (Y/N) Y

A roll-up door that retracts below the compartment ceiling (garage door style) shall not be acceptable. Comply: (Y/N) Y

The header for the roll-up door assembly shall not exceed 4.00". Comply: (Y/N) Y

A heavy-duty magnetic switch shall be used for control of "open compartment door" warning lights. Comply: (Y/N) Y

PUMP TEST

The pump shall be tested, approved and certified by an independent third party testing agency at the manufacturer's expense. The test results along with the pump manufacturer's certification of hydrostatic test, the engine manufacturer's certified brake horse power curve and the manufacturer's record of pump construction details shall be forwarded to the Fire Department. Comply: (Y/N) Y

REFERENCE DRAWING

A drawing of the proposed apparatus shall be provided for review. This drawing shall indicate the major components such as the chassis make and model, body configuration and door style, location of the lights, siren, horns, compartments, major components, etc. Comply: (Y/N) Y

All mechanical components of the door shall be warranted to be free from defects in materials and workmanship for the lifetime of the vehicle. All parts covered under this warranty shall be to the original owner. Comply: (Y/N) Y

The roll up doors exterior paint finish shall be warranted against blistering, peeling, bubbling, lack of adhesion or any other manufacturing or material defect for a period of six (6) years. Comply: (Y/N) Y

The roll up doors shall also be warranted against corrosion perforation for a period of ten (10) years. Comply: (Y/N) Y

COMPARTMENTATION, REAR

A roll-up door compartment above the rear tailboard shall be provided. Comply: (Y/N) Y

Interior dimensions of this compartment shall be approximately 40" wide x 54.13" high x 25.88"

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deep in the lower 45.25" of height and 15.75" deep in the remaining upper portion. Depth of the compartment shall be calculated with the compartment door closed. Comply: (Y/N) Y

Rear compartment shall be open into the rear side compartments. Comply: (Y/N) Y

Clear door opening of this compartment shall be approximately 33.25" wide x 45.25" high. Comply: (Y/N) Y

Closing of the door shall not require releasing, unlocking, or unlatching any mechanism and shall easily be accomplished with one hand. Comply: (Y/N) Y

ROLL-UP DOOR, REAR COMPARTMENT

The roll-up door shall be painted, double faced, aluminum construction. Comply: (Y/N) Y

Lath sections shall be an interlocking rib design and shall be individually replaceable without complete disassembly of door. Comply: (Y/N) Y

Between each slat at the pivoting joint shall be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals shall allow door to operate in extreme temperatures ranging from plus 180 to minus 40 degrees Fahrenheit. Side, top and bottom seals shall be provided to resist ingress of dirt and weather and be made of Santoprene. Comply: (Y/N) Y

All hinges, barrel clips and end pieces shall be nylon 66. All nylon components shall withstand temperatures from plus 300 to minus 40 degrees Fahrenheit. Hardened plastic shall not be acceptable. Comply: (Y/N) Y

A polished stainless steel lift bar shall be provided for opening door. Lift bar shall be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge shall be supplied over lift bar for additional area to aid in closing the door. Comply: (Y/N) Y

Door(s) shall be constructed from an aluminum box section. The exterior surface of each slat shall be flat. The interior surfaces shall be concave to provide strength and prevent loose equipment from jamming the door from inside. Comply: (Y/N) Y

To conserve space in the compartment(s), the spring roller assembly shall not exceed 3.00" in diameter. A roll-up door that retracts below the compartment ceiling (garage door style) shall not be acceptable. Comply: (Y/N) Y

The header for the roll-up door assembly shall not exceed 4.00". Comply: (Y/N) Y

A heavy-duty magnetic switch shall be used for control of "open compartment door" warning lights. Comply: (Y/N) Y

All mechanical components of the door shall be warranted to be free from defects in materials and workmanship for the lifetime of the vehicle. All parts covered under this warranty shall be to the original owner. Comply: (Y/N) Y

PULL-OUT TRAY

There shall be two (2) slide-out trays with 2.00" sides and a minimum capacity of 500 pounds provided. Capacity rating shall be in the extended position. Comply: (Y/N) Y

Slides shall be General Device ball bearing type for ease of operation and years of dependable service. Comply: (Y/N) Y

Automatic locks shall be provided for both the "in" and "out" positions. The trip mechanism for it shall be located at the front of the tray for ease of use with a gloved hand. Comply: (Y/N) Y

Tray location shall be in the rear compartment and the passenger's side rear compartment. Comply: (Y/N) Y

Heavy-duty steel angle iron assembly shall support the body under the compartment floor. It shall be attached to the chassis frame for load transfer and to reduce stress on body. Comply: (Y/N) Y

PULL-OUT ADJUSTABLE HEIGHT TRAY

There shall be one (1) slide-out tray with 2.00" sides and a minimum capacity of 500 pounds provided. Capacity rating shall be in the extended position. Comply: (Y/N) Y

Slides shall be Jonathan brand with ball bearings for ease of operation and years of dependable service. Comply: (Y/N) Y

Tray location shall be in the rear compartment. Comply: (Y/N) Y

Automatic locks shall be provided for both the "in" and "out" positions. The trip mechanism for it shall be located at the front of the tray for ease of use with a gloved hand. Comply: (Y/N) Y

Each tray shall be adjustable up and down within the compartment. Comply: (Y/N) Y

ADJUSTABLE SHELVES

There shall be six (6) shelves, with a minimum capacity of 215 pounds provided. The shelf construction shall consist of .125" pan-shaped aluminum with 2.00" sides. Each shelf shall be infinitely adjustable by means of a threaded fastener, which slides in a track. Comply: (Y/N) Y

The location shall be in the driver's side forward upper compartment, driver's side forward lower compartment, driver's side rearward upper compartment, passenger's side forward upper compartment, passenger's side forward lower compartment, and the passenger's side over the wheel compartment. Comply: (Y/N) Y

MOUNTING TRACKS

There shall be seven (7) sets of tracks for mounting shelf(s) in all compartments. These tracks shall be installed vertically to support the adjustable shelf(s). Comply: (Y/N) Y

RUB RAIL

Bottom edge of the side compartments shall be trimmed with a bright aluminum extruded rub rail. Comply: (Y/N) Y

Trim shall be approximately 2" high with 1.5" flanges turned outward for rigidity.

Comply: (Y/N) Y

The rub rails shall not be an integral part of the body construction, which allows replacement in the event of damage. Comply: (Y/N) Y

BODY FENDER CROWNS

Stainless steel fender crowns shall be provided around the rear wheel openings.

Comply: (Y/N) Y

A rubber welting shall be provided between the body and the crown to seal the seam and restrict moisture from entering. Comply: (Y/N) Y

A dielectric barrier shall be provided between the fender crown fasteners (screws) and the fender sheet metal to prevent corrosion. Comply: (Y/N) Y

HARD SUCTION HOSE

Hard suction hose to meet required NFPA 1901 specifications as outlined in Chapters 5 - 12.

Comply: (Y/N) Y

There shall be two (2) lengths of 10' long hose provided. The brand shall be Kochek.

Comply: (Y/N) Y

HOSE TROUGHS

Hard suction hose shall be carried in troughs, mounted one (1) above the other, inside the hose bed, on the driver's side. Comply: (Y/N) Y

Troughs shall be constructed of stainless steel.

Comply: (Y/N) Y

A strap shall be provided to contain the hose at the rear of the hose trough.

Comply: (Y/N) Y

HANDRAILS

The handrails shall be 1.25" diameter anodized aluminum extrusion, with a ribbed design, to provide a positive gripping surface. Comply: (Y/N) Y

Chrome plated end stanchions shall support the handrail. Plastic gaskets shall be used between end stanchions and any painted surfaces. Comply: (Y/N) Y

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Drain holes shall be provided in the bottom of all vertically mounted handrails.

Comply: (Y/N) Y

- Two (2) handrails shall be provided - one above each side pump panel.

Comply: (Y/N) Y

- One (1) vertical handrail, not less than 29.00" long, shall be located on each rear beavertail.

Comply: (Y/N) Y

- One (1) full width horizontal handrail shall be provided below the hose bed at the rear of the apparatus.

Comply: (Y/N) Y

AIR BOTTLE STORAGE

A total of four (4) air bottle compartments shall be provided, two (2) each side of the body. The air bottle compartment shall be in the form of a PVC round tube to accommodate different size air bottles. A Cast Products door with latch shall be provided to contain the air bottle.

Comply: (Y/N) Y

GROUND LADDERS

The following ladders shall be furnished and must meet or exceed the latest NFPA standards:

- 24', two (2) section, aluminum

Comply: (Y/N) Y

- 14' roof, aluminum

Comply: (Y/N) Y

LADDER STORAGE

The ladders shall be stored between the water tank and the passenger's side compartments.

Comply: (Y/N) Y

The ladders shall extend into the pump compartment just to the rear of the water pump discharges. A ladder stop shall be provided to prevent the ladders from contacting any pump or plumbing components. The ladder storage area shall be enclosed except for at the front where it extends into the pump compartment.

Comply: (Y/N) Y

Each ladder shall be stored vertically in a separate storage area.

Comply: (Y/N) Y

A pair of pike pole storage tubes and an area for a folding ladder shall also be provided.

Comply: (Y/N) Y

To properly contain the ladders, a bright aluminum tread plate enclosure shall be provided at the rear that shall extend to the rear of the body.

Comply: (Y/N) Y

The rear of the ladder storage area shall have a vertically hinged single pan door with a lift & turn latch.

Comply: (Y/N) Y

FOLDING LADDER

One (1) 10' aluminum folding ladder shall be installed in a U-shaped trough inside the ladder storage compartment. Comply: (Y/N) Y

STEPS

An Eberhard step shall be provided on the front of each fender compartment. The front step shall be a bright finished folding type. Comply: (Y/N) Y

REAR FOLDING STEPS

Chrome Eberhard folding steps and corner steps shall be provided at the rear. All steps shall provide adequate surface for stepping. Comply: (Y/N) Y

Two (2) additional folding steps, Eberhard, shall be located on the front of the body each side.

Comply: (Y/N) Y

PUMP

Pump shall be a Waterous CS, 1250 gpm, single stage midship mounted centrifugal type.

Comply: (Y/N) Y

Pump shall be the class "A" type.

Comply: (Y/N) Y

Pump shall deliver the percentage of rated discharge at pressure indicated below:

- 100% of rated capacity at 150 psi net pump pressure.
- 70% of rated capacity at 200 psi net pump pressure.
- 50% of rated capacity at 250 psi net pump pressure.

Comply: (Y/N) Y

Comply: (Y/N) Y

Comply: (Y/N) Y

Pump body shall be close-grained gray iron, bronze fitted, and must be horizontally split in two (2) sections for easy removal of the entire impeller shaft assembly (including wear rings).

Comply: (Y/N) Y

Pump shall be designed for complete servicing from the bottom of the truck, without disturbing the pump setting or apparatus piping.

Comply: (Y/N) Y

Pump case halves shall be bolted together on a single horizontal face, to minimize chance of leakage and facilitate ease of reassembly. No end flanges may be used. Comply: (Y/N) Y

Discharge manifold of the pump shall be cast as an integral part of the pump body assembly, and shall provide a minimum of three (3) 3.50" openings, for flexibility in providing various discharge outlets for maximum efficiency. Comply: (Y/N) Y

The 3.50" openings shall be located as follows: one (1) outlet to the right of the pump, one (1) outlet to the left of the pump, and one (1) outlet directly on top of the discharge manifold.

Comply: (Y/N) Y

Impeller shaft shall be stainless steel accurately ground to size, and supported at each end by sealed, anti-friction ball bearings, for rigid precise support.

Comply: (Y/N) Y

Bearings shall be protected from water and sediment by suitable stuffing boxes, flinger rings, and

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oil seals. No special or sleeve type bearings shall be used.

Comply: (Y/N) Y

Stuffing boxes shall be of the conventional two (2) pieces, split-gland type, to permit adjustment or replacement of Grafoil packing without disturbing the pump. Water shall be fed into stuffing box lantern rings for proper lubrication and cooling when the pump is operating.

Comply: (Y/N) Y

Lantern rings shall be located at the inner ends of the stuffing boxes, to avoid having to remove them when replacing pump packing.

Comply: (Y/N) Y

Wear rings shall be bronze and easily replaceable to restore original pump efficiency and eliminate the need to replace the entire pump casing due to wear.

Comply: (Y/N) Y

PUMP TRANSMISSION

Pump transmission shall be made of a three (3) piece, aluminum, horizontally split casing. Power transfer to pump shall be through a high strength Morse HY-VO silent drive chain.

Comply: (Y/N) Y

Drive shafts shall be a minimum of 2.35" diameter hardened and ground alloy steel. All shafts shall be ball bearing supported. The case shall be designed as to eliminate the need for water cooling.

Comply: (Y/N) Y

AIR PUMP SHIFT

Pump shift engagement shall be made by a two (2) position sliding collar, actuated pneumatically (by air pressure), with a three (3) position air control switch located in the cab. A manual back-up shift control shall also be located on the driver's side pump panel.

Comply: (Y/N) Y

Two (2) indicator lights shall be provided adjacent to the pump shift inside the cab. One (1) green light shall indicate the pump shift has been completed and be labeled "pump engaged". The second green light shall indicate when the pump has been engaged, and that the chassis transmission is in pump gear. This indicator light shall be labeled "OK to pump".

Comply: (Y/N) Y

Another green indicator light shall be installed adjacent to the hand throttle on the pump panel and indicate either the pump is engaged and the road transmission is in pump gear, or the road transmission is in neutral and the pump is not engaged. This indicator light shall be labeled "Warning: Do not open throttle unless light is on".

Comply: (Y/N) Y

TRANSMISSION LOCK-UP

The direct gear transmission lock-up for the fire pump operation shall engage automatically when the pump shift control, in the cab, is activated.

Comply: (Y/N) Y

AUXILIARY COOLING SYSTEM

A supplementary heat exchange cooling system shall be provided to allow the use of water from the discharge side of the pump for cooling the engine water. Heat exchanger shall be cylindrical type and shall be a separate unit. It shall be installed in the pump or engine compartment with

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the control located on the pump operator's control panel. Exchanger shall be plumbed to the master drain valve. Engine water lines shall be run inside plastic conduit. Comply: (Y/N) Y

INTAKE RELIEF VALVE

An Elkhart relief valve shall be installed on the suction side of the pump preset at 125 psig. Comply: (Y/N) Y

Relief valve shall have a working range of 75 psig to 250 psig. Comply: (Y/N) Y

Outlet shall terminate below the frame rails with a 2.50" National Standard hose thread adapter and shall have a "do not cap" warning tag. Comply: (Y/N) Y

Control shall be located behind an access door at the right (passenger's) side pump panel. Comply: (Y/N) Y

PRESSURE GOVERNOR

A Fire Research Corporation "Pump Boss" pressure sensing governor (PSG) system shall be provided. The PSG system shall eliminate the need for a discharge pressure relief valve. Comply: (Y/N) Y

The pressure governor system shall be connected directly to the engine mounted Electronic Control Module (ECM) or may be an integral part of the engine ECM. A pressure transducer shall be installed in the water discharge manifold on the pump. The transducer continuously monitors pump pressure sending a signal to the pressure governor. The pressure governor then sends a signal to the engine ECM, which modulates fueling in order to maintain a set pressure or engine speed (within engine/pump operating capabilities). There shall be no user serviceable items or maintenance required on the PSG system. The PSG system shall not require a mechanical drive, oil, or air supply for a means of control. Comply: (Y/N) Y

The pressure sensor governor system shall be operable only after the vehicle parking brake has been set, the transmission is the pumping mode, and the fire pump has been engaged. Comply: (Y/N) Y

The pressure sensor governor system shall have two (2) modes of operation: pressure mode or rpm mode. Comply: (Y/N) Y

When in the pressure mode, the PSG system shall automatically maintain the discharge pressure set by the operator regardless of flow (within engine/pump operating capabilities). Comply: (Y/N) Y

In the rpm mode, the PSG system shall automatically maintain a set engine speed, regardless of engine load (within engine operation capabilities). Comply: (Y/N) Y

A pump cavitation protection feature shall be provided which shall return the engine to idle should the pump cavitate. Comply: (Y/N) Y

A VHS videotape describing the operation, of the pressure governor, and troubleshooting

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procedures shall also be provided with the apparatus.

Comply: (Y/N) Y

ESP PRIMING PUMP

The priming pump shall be a Trident Emergency Products compressed air powered, high efficiency, multistage venture-based AirPrime System, conforming to standards outlined in NFPA pamphlet #1901.

Comply: (Y/N) Y

One (1) priming control shall open the priming valve and start the priming motor.

Comply: (Y/N) Y

Primer shall be environmentally safe and self-lubricating.

Comply: (Y/N) Y

IMPELLER HUB

The midship pump impeller hubs shall be flame plated.

Comply: (Y/N) Y

RECIRCULATING LINE

A .50" diameter recirculating line, from the pump to the water tank, shall be furnished with a control installed at the pump operator's control panel.

Comply: (Y/N) Y

PUMP MANUALS

Two (2) pump manuals from the pump manufacturer shall be furnished in compact disc format with the apparatus. Manuals shall cover pump operation, maintenance, and parts.

Comply: (Y/N) Y

PLUMBING

All inlet and outlet plumbing, 3.00" and smaller, shall be plumbed with either stainless steel pipe or synthetic rubber hose reinforced with hi-tensile polyester braid. Small diameter secondary plumbing such as drain lines shall be stainless steel, brass or hose.

Comply: (Y/N) Y

Where vibration or chassis flexing may damage or loosen piping or where a coupling is required for servicing, the piping shall be equipped with Victaulic or rubber couplings.

Comply: (Y/N) Y

Plumbing manifold bodies shall be ductile cast iron or stainless steel.

Comply: (Y/N) Y

All lines to drain through either a master drain valve or shall be equipped with individual drain valves. All individual drain lines for discharges shall be extended with a hose to drain below the chassis frame.

Comply: (Y/N) Y

All water carrying gauge lines shall be of flexible polypropylene tubing.

Comply: (Y/N) Y

MAIN PUMP INLETS

A 6.00" pump manifold inlet shall be provided on each side of the vehicle. The suction inlets shall include removable die cast zinc screens that are designed to provide cathodic protection for the pump, thus reducing corrosion in the pump.

Comply: (Y/N) Y

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The main pump inlets shall have National Standard Threads with a long handle chrome cap.

Comply: (Y/N) Y

The cap shall be designed to automatically relieve stored pressure in the line when disconnected.

Comply: (Y/N) Y

VALVES

All ball valves shall be Akron Brass in-line valves. The Akron valves shall be the 8000 series heavy-duty style with a stainless steel ball and a simple two-seat design. No lubrication or regular maintenance is required on the valve.

Comply: (Y/N) Y

INLET (Left side)

On the left side pump panel shall be one (1) - 2.50" auxiliary suction, terminating in 2.50" National Standard Hose Thread. The auxiliary suction shall be provided with a strainer, chrome swivel and plug.

Comply: (Y/N) Y

INLET (Right side)

On the right side pump panel shall be one (1) - 2.50" auxiliary suction, terminating in 2.50" National Standard Hose Thread. The auxiliary suction shall be provided with a strainer, chrome swivel and plug.

Comply: (Y/N) Y

The location of the valve for the two (2) inlets shall be recessed behind the pump panel.

Comply: (Y/N) Y

INLET CONTROL

Control for the side auxiliary inlet(s) shall be located at the inlet valve. Comply: (Y/N) Y

INLET BLEEDER VALVE

A .75" bleeder valve shall be provided for each side gated inlet. The valves shall be located behind the panel with a swing style handle control extended to the outside of the panel. The handles shall be chrome plated and provide a visual indication of valve position. The swing handle shall provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. The water discharged by the bleeders shall be routed below the chassis frame rails.

Comply: (Y/N) Y

TANK TO PUMP

The booster tank shall be connected to the intake side of the pump with heavy duty piping and a quarter turn 3.00" full flow line valve with the control remotely located at the operator's panel. Tank to pump line shall run straight (no elbows) from the pump into the front face of the water tank and angle down into the tank sump. A rubber coupling shall be included in this line to prevent damage from vibration or chassis flexing.

Comply: (Y/N) Y

A check valve shall be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.

Comply: (Y/N) Y

TANK REFILL

A 2.50" combination tank refill and pump re-circulation line shall be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.

Comply: (Y/N) Y

DISCHARGE OUTLETS (Left Side)

There shall be two (2) discharge outlets with a 2.50" valve on the left side of the apparatus, terminating with a male 2.50" National Standard hose thread adapter. Comply: (Y/N) Y

DISCHARGE OUTLETS (Right Side)

There shall be one (1) discharge outlet 2.50" valve on the right side of the apparatus, terminating with a male 2.50" National Standard hose thread adapter. Comply: (Y/N) Y

There shall be one (1) discharge outlet with a 3.00" valve on the right side of the apparatus, terminating with a male 3.00" National Standard hose thread adapter. Comply: (Y/N) Y

DISCHARGE OUTLET (Front)

There shall be a 1.50" gated discharge outlet plumbed to the lower portion of the tray located in the driver's side front bumper extension (center rear). Comply: (Y/N) Y

The discharge shall have a 90-degree swivel and terminate with 1.50" NHT.

Comply: (Y/N) Y

Plumbing shall consist of 2.00" piping with a 2.00" full flow ball valve controlled at the pump operator's panel. Comply: (Y/N) Y

Automatic drains shall be provided at all low points in the plumbing. Comply: (Y/N) Y

DISCHARGE CAPS

Chrome plated, rocker lug, caps with chains shall be furnished for all side discharge outlets.

Comply: (Y/N) Y

The caps shall be designed to automatically relieve stored pressure in the line when disconnected. (NO EXCEPTIONS)

Comply: (Y/N) Y

OUTLET BLEEDER VALVE

A .75" bleeder valve shall be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application.

Comply: (Y/N) Y

The valves shall be located behind the panel with a swing style handle control extended to the outside of the side pump panel. The handles shall be chrome plated and provide a visual indication of valve position. The swing handle shall provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. Bleeders shall be located at the bottom of the pump panel. They shall be properly labeled identifying the discharge they are plumbed in to. The water discharged by the bleeders shall be routed below the chassis frame rails.

Comply: (Y/N) Y

ELBOWS, LEFT SIDE OUTLETS

The 2.50" discharge outlets, located on the left side pump panel, shall be furnished with a 2.50"(F) National Standard hose thread x 2.50"(M) National Standard hose thread, chrome plated, 45 degree elbow.

Comply: (Y/N) Y

The elbow shall be designed to automatically relieve stored pressure in the line when disconnected. (NO EXCEPTIONS) Comply: (Y/N) Y

ELBOWS, RIGHT SIDE OUTLETS

The 2.50" discharge outlets, located on the right side pump panel, shall be furnished with a 2.50"(F) National Standard hose thread x 2.50"(M) National Standard hose thread, chrome plated, 45 degree elbow. Comply: (Y/N) Y

The elbow shall be designed to automatically relieve stored pressure in the line when disconnected. Comply: (Y/N) Y

ELBOW, 3.00" OUTLET

The 3.00" outlet shall be furnished with a 3.00"(F) National Standard hose thread x 5.00" Storz elbow adapter with Storz cap. Comply: (Y/N) Y

DISCHARGE OUTLET CONTROLS

The discharge outlets shall incorporate a quarter-turn ball valve with the control located at the pump operator's panel. The valve operating mechanism shall indicate the position of the valve. Comply: (Y/N) Y

If a hand wheel control valve is used, the control shall be a minimum of a 3.9" diameter chrome plated hand wheel with a dial position indicator built in to the center of the hand wheel. Comply: (Y/N) Y

DELUGE RISER

A 3.00" deluge riser shall be installed above the pump in such a manner that a monitor can be mounted and used effectively. Piping shall be installed securely so no movement develops when the line is charged. The riser shall be gated and controlled at the pump operator's panel. Comply: (Y/N) Y

The deluge riser shall have male National Pipe Threads for mounting the monitor.

Comply: (Y/N) Y

CROSSLAY HOSE BEDS

Two crosslays with 1.50" outlets shall be provided. Each bed shall be capable of carrying 200 feet of 1.75" double jacketed hose and shall be plumbed with 2.00" i.d. pipe and gated with a 2.00" quarter turn ball valve. Comply: (Y/N) Y

Outlets to be equipped with a 1.50" National Standard hose thread 90 degree swivel located in the hose bed so that hose may be removed from either side of apparatus. Comply: (Y/N) Y

The crosslay controls shall be at the pump operator's panel.

Comply: (Y/N) Y

The center crosslay dividers shall be fabricated of .25" aluminum and shall provide adjustment from side to side. The divider shall be unpainted with a DA finish. The remainder of the crosslay bed shall be painted job color. Comply: (Y/N) Y

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Vertical scuff plates, constructed of stainless steel, shall be provided at the front and rear ends of the bed on each side of vehicle. Comply: (Y/N) Y

Crosslay bed flooring shall consist of removable perforated brushed aluminum.

Comply: (Y/N) Y

CROSSLAY HOSE BED, 2.50"

One (1) crosslay with a 2.50" outlet shall be provided. The bed shall be capable of carrying 200' of 2.5" DJ hose (connection in center of bed) and shall be plumbed with 2.50" i.d. pipe and gated with a 2.50" quarter turn ball valve. Comply: (Y/N) Y

The outlet to be equipped with a 2.50" National Standard hose thread 90 degree swivel located in the hose bed so that hose may be removed from either side of apparatus. Comply: (Y/N) Y

The crosslay control shall be at the pump operator's panel.

Comply: (Y/N) Y

The center crosslay dividers shall be fabricated of .25" aluminum and shall provide adjustment from side to side. The divider shall be unpainted with a DA finish. The remainder of the crosslay bed shall be painted job color. Comply: (Y/N) Y

Stainless steel vertical scuff plates shall be provided at hose bed ends (each side of vehicle). Bottom of hose bed ends (each side) shall also be equipped with a stainless steel scuff plate.

Comply: (Y/N) Y

Crosslay bed flooring shall consist of removable perforated brushed aluminum.

Comply: (Y/N) Y

CROSSLAY/SPEEDLAY HOSE RESTRAINT

Elastic netting shall be provided across the top and on the ends of the crosslays/speedlays to secure the hose during travel. Comply: (Y/N) Y

CROSSLAY COVER

A hinged aluminum tread plate cover shall be installed over the crosslay hose beds. It shall include a latch at each end of the cover to hold it securely in place, a chrome grab handle at each end for opening and closing the cover and a foam rubber gasket where the cover comes into contact to a painted surface. Comply: (Y/N) Y

DEADLAY HOSE BEDS

One (1) deadlay bed, without plumbing, shall be provided behind the crosslays above the pump compartment capable of carrying two backboards. Comply: (Y/N) Y

There will be no center crosslay dividers. The hosebed shall be 18" tall x minimum 8" wide, but may utilize the entire cargo area. The deadlay shall be painted job color. Comply: (Y/N) Y

Stainless steel vertical scuff plates shall be provided at hose bed ends (each side of vehicle). Bottom of hose bed ends (each side) shall also be equipped with a stainless steel scuff plate.

Comply: (Y/N) Y

Deadlay bed flooring shall consist of removable perforated brushed aluminum.

Comply: (Y/N) Y

BACKBOARD STORAGE

A transverse area over the pump and forward shall hold two (2) backboards. A blister shall be supplied at each side to enclose the backboard due to its length.

Comply: (Y/N) Y

The backboards shall be accessible from the either side of the vehicle through stainless steel doors. The size of the back boards is 17" high x 72" long x 2.0" thick per backboard.

Comply: (Y/N) Y

PUMP COMPARTMENT

The pump compartment shall be separate from the hose body and compartments so that each may flex independently of the other. It shall be a fabricated assembly of steel tubing, angles and channels which supports both the fire pump and the side running boards.

Comply: (Y/N) Y

The pump compartment shall be mounted on the chassis frame rails with rubber biscuits in a four point pattern to allow for chassis frame twist.

Comply: (Y/N) Y

Pump compartment, pump, plumbing and gauge panels shall be removable from the chassis in a single assembly.

Comply: (Y/N) Y

PUMP MOUNTING

Pump shall be mounted to a substructure which shall be mounted to the chassis frame rail using rubber isolators. The mounting shall allow chassis frame rails to flex independently without damage to the fire pump.

Comply: (Y/N) Y

PUMP CONTROL PANELS (Left Side Control)

All pump controls and gauges shall be located at the left (driver's) side of the apparatus and properly identified.

Comply: (Y/N) Y

Layout of the pump control panel shall be ergonomically efficient and systematically organized.

Comply: (Y/N) Y

The pump operator's control panel shall be removable in two (2) main sections for ease of maintenance.

Comply: (Y/N) Y

The upper section shall contain sub panels for the mounting of the pump pressure control device, engine monitoring gauges, electrical switches, and foam controls (if applicable). Sub panels shall be removable from the face of the pump panel for ease of maintenance. Below the sub panels shall be located all valve controls and line pressure gauges.

Comply: (Y/N) Y

The lower section of the panel shall contain all inlets, outlets, and drains.

Comply: (Y/N) Y

All push/pull valve controls shall have 1/4 turn locking control rods with polished chrome plated zinc tee handles. Guides for the push/pull control rods shall be chrome plated zinc castings securely mounted to the pump panel. Push/pull valve controls shall be capable of locking in any

position. The control rods shall pull straight out of the panel and shall be equipped with universal joints to eliminate binding.

Comply: (Y/N) Y

IDENTIFICATION TAGS

The identification tag for each valve control shall be recessed in the face of the tee handle.

All discharge outlets shall have color coded identification tags, with each discharge having its own unique color. Color coding shall include the labeling of the outlet and the drain for each corresponding discharge.

Comply: (Y/N) Y

All line pressure gauges shall be mounted directly above the corresponding discharge control tee handles and recessed within the same chrome plated casting as the rod guide for quick identification. The gauge and rod guide casting shall be removable from the face of the pump panel for ease of maintenance. The casting shall be color coded to correspond with the discharge identification tag.

Comply: (Y/N) Y

All remaining identification tags shall be mounted on the pump panel in chrome plated bezels.

Comply: (Y/N) Y

The pump panel on the right (passenger's) side shall be removable with lift and turn type fasteners.

Comply: (Y/N) Y

Trim rings shall be installed around all inlets and outlets.

Comply: (Y/N) Y

The trim rings for the side discharge outlets shall be color coded and labeled to correspond with the discharge identification tag.

Comply: (Y/N) Y

PUMP PANEL CONFIGURATION

The pump panel configuration shall be arranged and installed in an organized manner that will provide user-friendly operation.

Comply: (Y/N) Y

PUMP AND GAUGE PANEL

The pump and gauge panels shall be constructed of black vinyl covered aluminum to allow easy identification of the gauges and controls and to eliminate glare.

Comply: (Y/N) Y

The black vinyl shall be bonded to the aluminum by the company that supplies the product.

Comply: (Y/N) Y

A polished aluminum trim molding shall be provided on both sides of the pump panel.

Comply: (Y/N) Y

The passenger's side pump panel shall be removable and fastened with swell type fasteners.

Comply: (Y/N) Y

PUMP PANEL GAUGES AND CONTROLS

The following shall be provided on the pump and gauge panels in a neat and orderly fashion:

- Fire Rescuc Corporation: With LED display of the engine oil pressure, engine temperature and

engine rpm. A warning alarm shall be provided for these items.

- Tachometer: Electric

- Voltmeter

Also provided at the pump panel shall be the following:

- Master Pump Drain Control

- Check Transmission Warning Indicator Light

- Stop Engine Warning Indicator Light

- Check Engine Warning Indicator Light

Comply: (Y/N) Y

AIR HORN BUTTON

An air horn control button shall be provided at the pump operator's control panel. This button shall be properly labeled and put within easy reach of the operator.

Comply: (Y/N) Y

GAUGES, VACUUM and PRESSURE

The pump vacuum and pressure gauges shall be silicone filled and manufactured by Class 1, Inc.

Comply: (Y/N) Y

The gauges shall be a minimum of 4.50" in diameter and shall have white faces with black lettering, with a pressure range of 30.00"-0-600#.

Comply: (Y/N) Y

The pump pressure and vacuum gauges shall be installed adjacent to each other at the pump operator's control panel.

Comply: (Y/N) Y

Test port connections shall be provided at the pump operator's panel. One shall be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They shall have 0.25 in. standard pipe thread connections and polished stainless steel plugs. They shall be marked with a label.

Comply: (Y/N) Y

PRESSURE GAUGES

The individual "line" pressure gauges for the discharges shall be interlube filled and manufactured by Class 1.

Comply: (Y/N) Y

They shall be a minimum of 2.50" in diameter and shall have white faces with black lettering.

Comply: (Y/N) Y

Gauges shall have a pressure range of 0-400#.

Comply: (Y/N) Y

The individual pressure gauge shall be installed as close to the outlet control as practical.

Comply: (Y/N) Y

WATER LEVEL GAUGE

A Fire rescue Corporation electronic water level gauge shall be provided on the operator's panel, which registers water level by means of five colored LED lights. The lights shall be durable, ultra-bright five LED design viewable through 180 degrees. The water level indicators shall be as follows:

- 100% = Green
- 75% = Yellow
- 50% = Yellow
- 25% = Yellow
- Refill = Red

Comply: (Y/N) Y

The light will flash when the level drops below the given level indicator to provide an eighth of a tank indication. To further alert the pump operator, the lights will flash sequentially when the water tank is empty.

Comply: (Y/N) Y

The level measurement shall be based on the sensing of head pressure of the fluid in the tank.

Comply: (Y/N) Y

The display shall be constructed of a solid plastic material with a chrome plated die cast bezel to reduce vibrations that can cause broken wires and loose electronic components. The encapsulated design shall provide complete protection from water and environmental elements. An industrial pressure transducer shall be mounted to the outside of the tank. The display measures head pressure to accurately show the tank level.

Comply: (Y/N) Y

WATER LEVEL GAUGE, CAB SIDES

There shall be two (2) additional water level indicators, Whelen, Model: PSTANK, LED module, installed behind the cab doors, as high as practical.

Comply: (Y/N) Y

This light module shall include four (4) colored levels, and function similar to the water level indicator located at the operators panel:

First green module indicates a full water level.

Second blue module indicates a water level above 3/4 full.

Third amber module indicates a water level above 1/2 full.

Last red module indicates a water level above 1/4 full and empty.

Above 1/4 this light shall be steady burning.

At empty this light shall be flashing.

Comply: (Y/N) Y

This module shall be activated when the pump is in gear.

Comply: (Y/N) Y

LIGHT SHIELD

Illumination shall be provided for controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus and the equipment provided on it. External illumination shall be a minimum of 5 foot-candles on the face of the device. Internal

illumination shall be a minimum of 4 foot lamberts.

Comply: (Y/N) Y

Lights shall be installed under a stainless steel shield.

Comply: (Y/N) Y

ELECTRICAL

All 12-volt electrical equipment installed by the apparatus manufacturer shall conform to modern automotive practices. All wiring shall be high temperature crosslink type. Wiring shall be run in loom or conduit where exposed and have grommets where wire passes through sheet metal. Automatic reset circuit breakers shall be provided which conform to SAE Standards. Wiring shall be color, function and number coded. Function and number codes shall be continuously imprinted on all wiring harness conductors at 2.00" intervals. Exterior exposed wire connectors shall be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids.

Comply: (Y/N) Y

Electrical wiring and equipment shall be installed utilizing the following guidelines:

(1) All holes made in the roof shall be caulked with silicon. Rope caulk is not acceptable. Large fender washers, liberally caulked, shall be used when fastening equipment to the underside of the cab roof.

Comply: (Y/N) Y

(2) Any electrical component that is installed in an exposed area shall be mounted in a manner that shall not allow moisture to accumulate in it. Exposed area shall be defined as any location outside of the cab or body.

Comply: (Y/N) Y

(3) Electrical components designed to be removed for maintenance shall not be fastened with nuts and bolts. Metal screws shall be used in mounting these devices. Also a coil of wire shall be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.

Comply: (Y/N) Y

(4) Corrosion preventative compound shall be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections shall require this compound in the plug to prevent corrosion and for easy separation (of the plug).

Comply: (Y/N) Y

(5) All lights that have their sockets in a weather exposed area shall have corrosion preventative compound added to the socket terminal area.

Comply: (Y/N) Y

(6) All electrical terminals in exposed areas shall have silicon (1890) applied completely over the metal portion of the terminal. All emergency light switches shall be mounted on a separate panel installed in the cab. A master warning light switch and individual switches to be provided to allow preselection of emergency lights. The light switches shall be "rocker" type with an internal indicator light to show when switch is energized. All switches shall be properly identified and mounted in a removable panel for ease in servicing. Identification of the switches shall be done by either printing or etching on the switch panel. The switches and identification shall be illuminated.

Comply: (Y/N) Y

All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, shall be furnished. Rear identification lights shall be recessed mounted for protection. Lights and wiring mounted in the rear bulkheads shall be protected from damage by installing a false bulkhead inside the rear compartments. Comply: (Y/N) Y

An operational test shall be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order. Comply: (Y/N) Y

The results of the tests shall be recorded and provided to the purchaser at time of delivery. Comply: (Y/N) Y

STEP LIGHTS

Four (4) LED, step lights shall be provided. One (1) step light shall be provided on each side, on the front compartment face and two (2) step lights at the rear to illuminate the tailboard. Comply: (Y/N) Y

These step lights shall be actuated with the pump panel light switch. Comply: (Y/N) Y

REAR FMVSS LIGHTING

The rear stop/tail and directional LED lighting shall consist of the following: Comply: (Y/N) Y

Two (2) Whelen model 60R00XRR red LED stop/tail lights.

Two (2) Whelen model 60A00TAR amber LED arrow turn lights.

Each light shall be installed separately at the rear with a flange. Comply: (Y/N) Y

Four (4) red reflectors shall be provided. Comply: (Y/N) Y

A Weldon, Model 23882-2600-00, license plate bracket shall be mounted on the driver's side above the warning lights. A Weldon, Model 9186-23882-30, step lamp shall illuminate the license plate. Comply: (Y/N) Y

Two (2) Whelen, Model: 60J000CR, backup lights shall be provided. Comply: (Y/N) Y

Both lights shall be installed with 6E or 64 Flange Kit. Comply: (Y/N) Y

The three (3) identification lights located at the rear shall be installed per the following:

As close as practical to the vertical Centerline.

Centers spaced not less than six (6) inches or more than twelve (12) inches apart.

Red in color.

All at the same height.

(3) Ri-Tar red Model M27 LED lights or (1) Truck Lite model 15050R LED ID bar Comply: (Y/N) Y

The outside clearance lights located at the rear shall be installed per the following:

To indicate the overall width of the vehicle.

At least one (1) each side of the vertical Centerline.

All at the same height.
As near the top as practical.
To be visible from the rear and the side.
(4) Ri-Tar red Model M27 LED lights

Comply: (Y/N) Y

Per FMVSS 108 and CMVSS 108 requirements.

Comply: (Y/N) Y

MAP LIGHT

One (1) map light with goose neck and toggle switch control shall be provided. The map light shall be a Federal Lite, Model LF18ESB, and be located on the center console. Each map light shall be provided with an 18.00" long flexible neck that exits the top of the chassis mount.

Comply: (Y/N) Y

Each light shall be provided with a red filter that easily slides over the clear lamp for night vision.

Comply: (Y/N) Y

"DO NOT MOVE APPARATUS" INDICATOR

A Whelen, model CR12, rotating beacon indicator light with red lens (located in the driving compartment) shall be illuminated automatically (per NFPA 1996 edition, 9-11 or 1999 edition, 11-11) when the vehicle's parking brake is not fully engaged, and passenger or equipment door is open, or powered light tower is extended. The light shall be labeled "Do Not Move Apparatus If Light Is On".

Comply: (Y/N) Y

OPEN DOOR INDICATOR LIGHT

A red "open door" indicator light shall be provided inside the cab, in clear view of the driver, to warn of an open compartment door.

Comply: (Y/N) Y

COMPARTMENT LIGHTING

6.00" diameter Truck-Lite, model 79384, light/s shall be provided in each enclosed compartment. Each light shall have a number 1076 one filament, two wire bulb.

Comply: (Y/N) Y

Opening the compartment door shall automatically turn compartment lighting on.

Comply: (Y/N) Y

PUMP COMPARTMENT LIGHT

A compartment light shall be provided inside the pump enclosure.

Comply: (Y/N) Y

PERIMETER SCENE LIGHTS, CAB

There shall be a Truck-Lite, model 40003, 4.00" grommet mount weatherproof light provided for each cab door. Lighting shall be designed to provide illumination on areas under the driver, officer, and crew cab riding area exits, which shall be activated automatically when the exit doors are opened and by the same means as the body perimeter lights.

Comply: (Y/N) Y

The lighting shall be capable of providing illumination at a minimum level of one (1) foot-candle on ground areas within 30.00" of the edge of the apparatus in areas which personnel climb in or

out of the apparatus or descend from the apparatus to the ground level. Comply: (Y/N) Y

PERIMETER SCENE LIGHTS, BODY

There shall be a total of four (4) Truck-Lite, model 40003, 4.00" grommet mount weatherproof lights provided on the apparatus. Two (2) lights shall be provided under the rear step area and two (2) lights shall be provided under the pump panel running boards. The lights shall be spaced one (1) each side of apparatus and have a clear lens. The perimeter scene lights shall be activated by a rocker switch in the cab. Comply: (Y/N) Y

The lighting shall be capable of providing illumination at a minimum level of one (1) foot-candle on ground areas within 30.00" of the edge of the apparatus in areas designed for personnel to climb onto the apparatus or descend from the apparatus to the ground level.

Comply: (Y/N) Y

REAR SCENE LIGHTS

One (1) pair of Whelen, Model 60*000*U, halogen scene lights shall be installed at the rear of the truck, on each side of the rear of the body as high as possible. Comply: (Y/N) Y

These lights shall have thirteen degree internal optics.

Comply: (Y/N) Y

The lights shall be controlled by rocker switch in the cab.

Comply: (Y/N) Y

These lights shall be installed with flange.

Comply: (Y/N) Y

12 VOLT LIGHTING

Two (2) lights, Havis-Shields, Magnafire 3000 Model: 31, 70 watt, 12VDC, floodlights with switch, shall be installed, each side of the pump house. Comply: (Y/N) Y

A pull up pole, side mount shall be installed for each light head.

Comply: (Y/N) Y

These lights shall be load managed when the parking brake is set.

Comply: (Y/N) Y

These lights shall not be connected to the Do Not Move Truck indicator. Comply: (Y/N) Y

CAB SPOTLIGHT

One (1) GOLIGHT, model 2020, will be mounted in front of the lightbar, centered on the cab roof. The spotlight will be remote controlled from inside the cab, by a four (4) position joystick. The joystick will be within easy reach of the driver. Comply: (Y/N) Y

DECK LIGHTS

Two (2)-6.00" Unity AG deck lights with swivel mount shall be provided at the rear of the hose bed, one (1) each side. Comply: (Y/N) Y

One (1) light shall be furnished with a 160,000 candle power halogen spot bulb and the other shall be furnished with a 6,000 candle power halogen flood bulb. Comply: (Y/N) Y

AIR HORN SYSTEM

Two (2) Grover air horns shall be provided and located, in the front bumper, recessed each side of the hose tray. The horn system shall be piped to the air brake system wet tank utilizing .38" tubing. A pressure protection valve shall be installed in-line to prevent loss of air, in the air brake system.

Comply: (Y/N) Y**AIR HORN CONTROL**

The air horns shall be actuated by a push button located on officer side instrument panel and by the horn button in the steering wheel. The driver shall have the option to control the air horns or the chassis horns from the horn button by means of a selector switch located on the instrument panel.

Comply: (Y/N) Y**ELECTRONIC SIREN**

A Whelen, Model: 295HFS A1, electronic siren with noise canceling microphone shall be provided.

Comply: (Y/N) Y

Siren head shall be located in the center console.

Comply: (Y/N) Y

The electronic siren shall be controlled on the siren head only. No horn button or foot switches shall be required.

Comply: (Y/N) Y**SPEAKER**

There shall be one (1) speaker provided and recessed in the bumper extension. Each speaker shall be a Federal, model BP100P, 100 watt, bumper mount, with polished aluminum finish. Each speaker shall be connected to the siren amplifier.

Comply: (Y/N) Y**ELECTRONIC SIREN, (Auxiliary)**

A Federal, model E-Q2B, electronic siren with noise canceling microphone shall be provided.

Comply: (Y/N) Y**SWITCHES, MECHANICAL SIREN**

The mechanical siren shall be actuated by one (1) foot switch located on the driver's side and a push button switch on the officer's side of cab.

Comply: (Y/N) Y**AUXILIARY SPEAKER**

There shall be one (1) speaker recessed in the front bumper, driver's side. Comply: (Y/N) Y

The speaker to be supplied shall be a Federal, Model: BP200-EF, 200 watt.

Comply: (Y/N) Y

This speaker shall be connected to the auxiliary electronic siren.

Comply: (Y/N) Y**WARNING LIGHTS**

A Whelen Freedom model FN**QLED lightbar shall be mounted on the cab roof.

Comply: (Y/N) Y

The length of the lightbar shall be 72"

Comply: (Y/N) Y

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The lightbar shall include the following:

- Six (6) red flashing forward facing LED modules.
- Two (2) clear flashing forward facing LED modules.
- Two (2) red flashing front corner LED modules.
- One (1) red flashing driver side facing LED module.
- One (1) red flashing officer side facing LED module.
- One (1) Opticom™, traffic light controller with National standard.

Comply: (Y/N) Y

All lenses shall be clear

Comply: (Y/N) Y

Two (2) switches located in the cab on the switch panel shall control this lightbar.

- One (1) switch for the warning lights.
- One (1) switch for the traffic light controller.

Comply: (Y/N) Y

To meet NFPA requirements the clear warning lights and the traffic light controller will be turned off when the parking brake is set.

Comply: (Y/N) Y

SIDE ZONE LOWER LIGHTING

Four (4) Whelen model 60*02F*R, flashing Super LED warning lights shall be located in the following positions:

- Two (2) lights, one each side on the bumper extension
 - The color of these lights shall be red Super LED/red lens each side.
- Two (2) lights, one each side in the rear body fender panel area.
 - The color of these lights shall be red Super LED/red lens each side.

Comply: (Y/N) Y

The above four (4) lights shall be required to meet or exceed the lower level optical warning and optical power requirements of NFPA.

Comply: (Y/N) Y

These lights shall be controlled by a lighted switch on the cab instrument panel.

Comply: (Y/N) Y

These lights shall be installed with a flange.

Comply: (Y/N) Y

REAR ZONE LOWER LIGHTING

Two (2) Whelen model 60*02F*R flashing "Super" LED warning lights shall be located at the rear of the apparatus, required to meet or exceed the lower level optical warning and optical power requirements of NFPA.

Comply: (Y/N) Y

The color of these lights shall be red Super LED/red lens.

Comply: (Y/N) Y

One (1) switch in the cab on the switch panel shall control these lights.

Comply: (Y/N) Y

These lights shall be installed with a flange.

Comply: (Y/N) Y

WARNING LIGHTS (Rear of Hose Bed)

Two (2) Whelen L31HRFN LED warning beacons shall be provided at the rear of the truck located one (1) each side. These lights shall be activated by a lighted switch on the instrument panel. The color of the lights shall be red.

Comply: (Y/N) Y

The rear warning lights shall be mounted on top of the compartmentation with all wiring totally enclosed. The rear deck lights shall be mounted on the beavertails high as possible.

Comply: (Y/N) Y

PAINT

The exterior custom body painting finishing process as follows:

Manual Surface Preparation - All exposed metal surfaces on the custom body shall be thoroughly cleaned and prepared for painting. Surfaces that shall not be painted include all chrome plated, stainless steel, anodized aluminum and bright aluminum tread plate. Each imperfection on the exterior metal surface shall be removed or filled and then sanded smooth for a smooth appearance. All seams shall be sealed before painting.

Comply: (Y/N) Y

Chemical Cleaning and Treatment - The metal surfaces shall be properly cleaned using an acid etching system. Surfaces are chemically cleaned to remove all dirt, oil, grease and metal oxides to ensure the subsequent coatings bond well. An ultra pure water final rinse shall be applied to all metal surfaces, excluding undercarriage components, at the conclusion of the metal treatment process.

Comply: (Y/N) Y

Sealer Primer Coat - A two (2) component sealer primer coat shall be applied.

Comply: (Y/N) Y

Topcoat Paint - Two (2) coats of an automotive grade, two (2) component acrylic urethane paint, shall also be applied.

Comply: (Y/N) Y

All removable items such as brackets, compartment doors, door hinges, trim, etc. shall be removed and painted separately to insure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly shall be finish painted before assembly.

Comply: (Y/N) Y

The chassis shall be painted by the chassis manufacturer, and shall remain the commercial grade finish as provided. To ensure a good color match between the body and chassis, the apparatus manufacturer and chassis manufacturer shall have a mutually pre-approved paint color program. The apparatus shall be painted candy apple red.

Comply: (Y/N) Y

Prior to reassembly and reinstallation of lights, handrails, door hardware and any miscellaneous body items, an isolation tape or gasket material must be used to prevent damage to the finish painted surfaces (no exceptions). A nylon washer shall be installed under each acorn nut or metal screw that is fastened directly to a painted body surface.

Comply: (Y/N) Y

PAINT - ENVIRONMENTAL IMPACT

Contractor shall meet or exceed all current State (his) regulations concerning paint operations. Pollution control shall include measures to protect the atmosphere, water and soil. Controls shall include the following conditions:

- Topcoats and primers must be chrome and lead free.
- Metal treatment chemicals must be chrome free. The wastewater generated in the metal treatment process must be treated to remove any other heavy metals.
- Particulate emissions from painting operations must be collected by a dry filter or water wash process.
- Solvents used in clean-up operations must be collected, sent off-site for distillation and returned for reuse.

Comply: (Y/N) Y

Additionally, the finished apparatus shall not be manufactured with or contain products that have ozone depleting substances. Contractor shall, upon demand, present evidence that his manufacturing facility meets the above conditions and that it is in compliance with his State EPA rules and regulations.

Comply: (Y/N) Y**PAINT CHASSIS FRAME ASSEMBLY**

The chassis frame assembly shall remain the color and paint quality as received from the chassis manufacturer. The frame and components shall not be repainted.

Comply: (Y/N) Y

Components that are considered part of the "frame assembly" are frame rails, cross members, axles, suspension, steering gear and the fuel tank.

Comply: (Y/N) Y**PAINT, COMPARTMENT INTERIOR**

Interior of compartmentation shall be painted with gray spatter type paint.

Comply: (Y/N) Y**REFLECTIVE STRIPES**

Three (3) reflective stripes shall be provided across the front of the vehicle and along the sides of the body. The reflective band shall consist of a 1.00" blue stripe at the top with a 1.00" gap then a 6.00" white stripe with a 1.00" gap and a 1.00" blue stripe on the bottom. A 4.00" band shall be provided at the rear of the apparatus.

Comply: (Y/N) Y**"Z" JOG IN REFLECTIVE STRIPE**

There shall be One (1) "Z"-shaped jog/s provided in the reflective stripe design.

Comply: (Y/N) Y**CHEVRON/INVERTED "V" STRIPING ON REAR BULKHEADS**

There shall be alternating chevron striping located on the rear bulkheads.

Comply: (Y/N) Y

The striping shall consist of the following colors:

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The first color shall be red
The second color shall be fluorescent green

Comply: (Y/N) Y

The size of the striping shall be 4.00".

Comply: (Y/N) Y

The reflective band provided on the cab face shall be between the front grille and the front bumper.

Comply: (Y/N) Y

REFLECTIVE STRIPE, CAB DOORS

A 6.00" x 16.00" white reflective stripe shall be provided across the interior of each cab door. The stripe will be located approximately 1.00" up from the bottom, on the stainless steel door panel.

Comply: (Y/N) Y

This stripe shall meet the NFPA 1901 requirement.

Comply: (Y/N) Y

REFLECTIVE LETTERING

Three (3) letters, 18.00" high white reflective shall be installed on the crew cab roof.

Comply: (Y/N) Y

REFLECTIVE LETTERING ON ROLL-UP DOORS

Six (6) letters, 18.00" high letter/s, made of blue reflective vinyl, with outline or shade, shall be installed on the roll-up doors at the rear each side and on the rear of the body. Navy blue numbers with white outline on side and red with black outline on rear.

Comply: (Y/N) Y

EMBLEMS -- CUSTOMIZED

One (1) pair of Scotchlite emblems shall be fabricated from fire department supplied artwork. The emblems shall be installed over-the-wheel compartment doors. The size of these emblems shall be approximately 24" by 24".

Comply: (Y/N) Y

EMBLEMS --CAB DOORS

One (1) pair of Scotchlite emblems shall be fabricated from fire department supplied artwork. The emblems shall be installed on front cab doors and shall match the county fire department seals.

Comply: (Y/N) Y

NFPA 2004 STANDARDS

This unit must comply with the NFPA standards effective January of 2004.

Comply: (Y/N) Y

Certification of slip resistance of all stepping, standing and walking surfaces must be supplied with delivery of the apparatus.

Comply: (Y/N) Y

A plate that is highly visible to the driver while seated shall be provided. This plate shall show the overall height, length, and gross vehicle weight rating.

Comply: (Y/N) Y

The manufacturer shall have programs in place for training, proficiency testing and performance for any staff involved with certifications.

Comply: (Y/N) Y

3.1 DEFINITIONS

Addenda: A written change to a solicitation.

Bid: Shall refer to any offer(s) submitted in response to this Invitation to Bid.

Bidder: Shall refer to anyone submitting a bid in response to an Invitation to Bid.

Contract: The agreement to perform the services set forth in this solicitation. The contract will be comprised of the solicitation document signed by both parties with any addenda and other attachments specifically incorporated.

Contractor: The vendor to which award has been made.

County: Shall refer to Lake County, Florida.

Invitation to Bid (ITB): Shall mean this solicitation document, including any and all addenda. An ITB contains well-defined terms, conditions, and specifications, and is awarded to the lowest priced responsive and responsible bidder.

Modification: A written change to a contract.

Responsible: Refers to a bidder that has the capacity and capability to perform the work required under an Invitation to Bid, and is otherwise eligible for award.

Responsive: Refers to a bidder that has taken no exception or deviation from the terms, conditions, and specifications set forth in an Invitation to Bid.

Solicitation: The written document requesting either bids or proposals from the marketplace.

Vendor: A general reference to any entity responding to this solicitation or performing under any resulting contract.

The County has established that the words "shall", "must", or "will" are equivalent within this ITB and indicate a mandatory requirement which shall not be waived by the County.

3.2 INSTRUCTIONS TO BIDDERS**A. Bidder Qualification**

It is the policy of the County to encourage full and open competition among all available qualified vendors. All vendors regularly engaged in the type of work specified in the solicitation are encouraged to submit bids. To be recommended for award the County requires that vendors provide evidence of compliance with the requirements below upon request:

1. Disclosure of Employment
2. Disclosure of Ownership
3. Drug-Free Workplace
4. W-9 and 8109 Forms – The vendor must furnish these forms upon request as required by the Internal Revenue Service.
5. Social Security Number – The vendor must provide a copy of the primary owner's social security card if the social security number is being used in lieu of the Federal Identification Number (F.E.I.N.)
6. Americans with Disabilities Act (A.D.A.)
7. Conflict of Interest
8. Debarment Disclosure Affidavit
9. Nondiscrimination
10. Family Leave
11. Antitrust Laws – By acceptance of any contract, the vendor agrees to comply with all applicable antitrust laws.

B. Public Entity Crimes

Pursuant to Section 287.133(2)(a) of the Florida Statutes, a person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017 of the Florida Statutes, for CATEGORY TWO for a period of 36 months from the date of being placed on the convicted vendor list.

C. Request for Additional Information

Any communication or inquiries, except for clarification of process or procedure already contained in the solicitation, are to be made in

writing to the attention of the procurement representative identified in the solicitation no later than five (5) working days prior to the bid due date. Such inquiries shall contain the requester's name, address, and telephone number. The Procurement Services Office may issue an addendum in response to any inquiry received, prior to bid opening, which changes, adds to, or clarifies the terms, provisions, or requirements of the solicitation. The bidder should not rely on any statement or explanation whether written or verbal, other than those made in this solicitation document or in any addenda issued. Where there appears to be a conflict between this solicitation and any addenda, the last addendum issued shall prevail. It is the bidder's responsibility to ensure receipt and to acknowledge all addenda and any accompanying documentation. Failure to acknowledge each addendum may prevent the bid from being considered for award.

D. Contents of Solicitation and Bidders' Responsibilities

It is the responsibility of the bidder to become thoroughly familiar with the requirements, terms, and conditions of this solicitation. Stated unawareness of contractual terms and conditions will not be accepted as a basis for varying the requirements of the County or the amount to be paid to the vendor.

E. Restricted Discussions

From the date of issuance of this solicitation until final County action, vendors should not discuss the solicitation with any employee, agent, or any other representative of the County except as authorized by the designated procurement representative. The only communications that shall be considered pertinent to this solicitation are written documents from the vendor addressed to the designated procurement representative and relevant documents promulgated by the designated procurement representative.

F. Change to, Withdrawal of, or Mistake in, Bid

Changes to Bid - Prior to bid opening, a bidder may change its bid by submitting a new bid with notice on the firm's letterhead, signed by an authorized agent, stating that the new submittal replaces the original submittal. The new submittal shall contain all information as required for submitting the original bid.

Withdrawal of Bid - A bid may be withdrawn, either physically or by written notice, at any time prior to the bid due date. If withdrawn by written notice, that notice must be addressed to, and received by, the designated procurement representative prior to the bid due date and time. A bid may also be withdrawn after expiration of the specified bid acceptance period, and prior to award, by submitting a letter to the designated procurement representative. The withdrawal letter must be on company letterhead and signed by an authorized agent of the bidder.

Mistake in Bid - Any allegation of mistake in Bid shall be treated on a case-by-case basis. It is to be assumed that any alteration in bid price after receipt of bids will be exceptional in nature, and will be allowed only when substantiated by current legal precedence.

G. Conflicts within the Solicitation

Where there appears to be a conflict between contractual terms and conditions, the technical specifications, the pricing section, or any addendum issued, the order of precedence shall be: last addendum issued, the pricing section, the technical specifications, the special, and then general conditions. It is incumbent upon the vendor to identify such conflicts prior to the bid response date.

H. Prompt Payment Terms

It is the policy of the County that payment for all purchases by County agencies shall be made in a timely manner and that interest payments will be made on late payments in accordance with Part VII, Chapter 218, Florida Statutes, known as the Florida Prompt Payment Act. The bidder may offer cash discounts for prompt payments; however, such discounts will not be considered in determining the lowest price during bid evaluation. Bidders are requested to provide prompt payment terms in the space provided on the signature page of the solicitation.

3.3 PREPARATION OF BIDS

- A. The Pricing Section of this solicitation defines the goods or services to be purchased, and must be completed and submitted with the bid. Use of any other form or alteration of

- the form may result in the rejection of the bid.
- B. The bid submitted must be legible, and completed using typewriter, computer or ink. Any entry change must be crossed out and initialed in ink. Failure to comply with these requirements may cause the bid to be rejected.
 - C. An authorized agent of the bidder's firm must sign the bid. **FAILURE TO SIGN THE BID MAY RENDER THE BID NON-RESPONSIVE.**
 - D. The bidder may be considered non-responsive if bids are conditioned to modifications, changes, or revisions to the terms and conditions of this solicitation.
 - E. The bidder may submit alternate bid(s) for the same solicitation provided that such offer is allowable under the terms and conditions. The alternate bid must meet or exceed the minimum requirements and be submitted as a separate bid marked "Alternate Bid".
 - F. When there is a discrepancy between the unit prices and any extended prices, the unit prices will prevail.
 - G. Any bid received after the stipulated bid due date and time through no fault of the County will be considered late, and except under the most exceptional circumstances, not be considered for award.
 - H. Unless otherwise specified in the solicitation, prices quoted shall be F.O.B. Destination.

3.4 COLLUSION

Where two (2) or more related parties, as defined herein, each submit a bid for the same contract, or evidence any prior understanding, agreement, or connection in such regard, such bids shall be presumed to be collusive. Related parties shall mean bidder or principals thereof that have a direct or indirect ownership interest in another bidder for the same contract or in which a parent company or the principals thereof of one bidder have a direct or indirect ownership interest in another bidder for the same contract. Bids found to be collusive shall be rejected. Bidders which have been found to have engaged in collusion may be considered non-responsive, and may be suspended or debarred. Any contract resulting from collusive bidding may be terminated for default.

3.5 PROHIBITION AGAINST CONTINGENT FEES

The vendor warrants that they have not employed or retained any company or person, other than a bona fide employee working solely for the vendor to solicit or secure the contract and that they have not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for the vendor, any consideration contingent upon or resulting from the award or making of the contract.

3.6 CONTRACTING WITH COUNTY EMPLOYEES

Any County employee or member of his or her immediate family seeking to contract with the County shall seek a conflict of interest opinion from the County Attorney prior to submittal of a response to contract with the County. The affected employee shall disclose the employee's assigned function within the County and interest or the interest of his or her immediate family in the proposed contract and the nature of the intended contract.

3.7 INCURRED EXPENSES

This solicitation does not commit the County to award nor be responsible for any cost or expense which may be incurred by any bidder in preparing or submitting a bid, or any cost or expense incurred prior to the execution of a purchase order or contract.

3.8 COUNTY IS TAX-EXEMPT

When purchasing on a direct basis, the County is generally exempt from Federal Excise Taxes and all State of Florida sales and use taxes. The County will provide an exemption certificate if requested by the seller for such purchases. Except for item(s) specifically identified by the vendor and accepted by the County for direct County purchase under the Sales Tax Recovery Program, Contractors doing business with the County are not exempt from

paying sales tax to their suppliers for materials to fulfill contractual obligations with the County; nor shall any contractor be authorized to use any of the County's Tax Exemptions in securing such materials.

3.9 PROPRIETARY/CONFIDENTIAL INFORMATION

Bidders are hereby notified that all information submitted as part of a bid will be available for public inspection in compliance with Chapter 119 of the Florida Statutes (the "Public Record Act"). The bidder should not submit any information which the bidder considers proprietary or confidential. The submission of any information to the County in connection with any solicitation shall be deemed conclusively to be a waiver of any protection from release of the submitted information unless such information is exempt or confidential under the Public Records Act.

3.10 CANCELLATION OF SOLICITATION

The County reserves the right to cancel, in whole or in part, any Invitation to Bid when it is in the best interest of the County.

3.11 AWARD

- A. Unless otherwise allowed by statute or ordinance, award will be made to the lowest priced responsive and responsible bidder. The County reserves the right to reject any and all bids, to waive non-material irregularities or technicalities and to re-advertise for all or any part of this solicitation as deemed in its best interest. The County shall be the sole judge of its best interest.
- B. When there are multiple line items in a solicitation, the County reserves the right to award on an individual item basis, any combination of items, total low bid or in whichever manner deemed in the best interest of the County. This provision specifically supersedes any method of award criteria stated in the solicitation when such action is clearly necessary to protect the best interests of the County.
- C. The County reserves the right to reject any and all bids if it is determined that prices are excessive or determined to be unreasonable, or it is otherwise determined to be in the County's best interest to do so.
- D. The County reserves the right to negotiate prices with the low bidder, provided that the scope of work is not amended.
- E. Award will only be made to firms that satisfy all legal requirements to do business with the County. The County may conduct a pre-award inspection of the bidder's site or conduct a pre-award qualification meeting to determine the responsibility and capacity of the bidder to perform. Award may be predicated on compliance with and submittal of all required documents as stipulated in the solicitation.
- F. The bidder's performance as prime or subcontractor on previous County contracts shall be taken into account in evaluating the responsibility of a responding bidder.
- G. The Director of Procurement Services will decide all tie bids in consonance with current written procedure in that regard.
- H. A vendor wishing to protest any award decision resulting from this solicitation shall do as provided for in the County's Purchasing Procedure Manual.

3.12 GENERAL CONTRACT CONDITIONS

The contract shall be binding upon and shall inure to the benefit of each of the parties and of their respective successors and permitted assigns. The contract may not be amended, released, discharged, rescinded or abandoned, except by a written instrument duly executed by each of the parties hereto. The failure of any party hereto at any time to enforce any of the provisions of the contract will in no way constitute or be construed as a waiver of such provision or of any other provision hereof, nor in any way affect the validity of, or the right thereafter to enforce, each and every provision of the contract. Any dispute arising during the course of contract performance that is not readily rectified by coordination between the vendor and the County user department shall be referred to Procurement Services office for resolution.

3.13 OTHER AGENCIES

With the consent of the vendor, other agencies may make purchases in accordance with the contract. Such purchases shall be governed by the same terms and conditions as stated herein with the exception of the change in agency name.

3.14 CONTRACT EXTENSION

The County has the unilateral option to extend a contract for up to ninety (90) calendar days beyond the current contract period. In such event, the County will notify the vendor(s) in writing of such extensions. The contract may be extended beyond the initial ninety (90) day extension upon mutual agreement between the County and the vendor(s). Exercise of the above options requires the prior approval of the Director of Procurement Services.

3.15 WARRANTY

All warranties express and implied, shall be made available to the County for goods and services covered by this solicitation. All goods furnished shall be fully guaranteed by the vendor against factory defects and workmanship. At no expense to the County, the vendor shall correct any and all apparent and latent defects that may occur within the manufacturer's standard warranty period. The special conditions of the solicitation may supersede the manufacturer's standard warranty.

3.16 ESTIMATED QUANTITIES

Estimated quantities or dollars are for bidder's guidance only. No guarantee is expressed or implied as to quantities or dollar value that will be used during the contract period. The County is not obligated to place any order for a given amount subsequent to the award of this solicitation. The County may use estimated quantities in the award evaluation process. Estimated quantities do not contemplate or include possible additional quantities that may be ordered by other entities that may utilize this contract. In no event shall the County be liable for payments in excess of the amount due for quantities of goods or services actually ordered.

3.17 NON EXCLUSIVITY

It is the intent of the County to enter into an agreement that will satisfy its needs as described within this solicitation. However, the County reserves the right to perform, or cause to be performed, all or any of the work and services herein described in the manner deemed to represent its best interests. In no case will the County be liable for billings in excess of the quantity of goods or services actually provided under this contract.

3.18 CONTINUATION OF WORK

Any work that commences prior to, and will extend, beyond the expiration date of the current contract period shall, unless terminated by mutual written agreement between the County and the vendor, continue until completion without change to the then current prices, terms and conditions.

3.19 LAWS, RULES, REGULATIONS AND LICENSES

The vendor shall comply with all federal, state, and local laws and regulations applicable to provision of the goods and/or services specified in this solicitation. During the term of the contract the vendor assures that it is in compliance with Title VII of the 1964 Civil Rights Act, as amended, and the Florida Civil Rights Act of 1992, in that the vendor does not on the grounds of race, color, national origin, religion, sex, age, disability or marital status, discrimination in any form or manner against the end/or employees or applicants for employment. The vendor understands that any contract is conditioned upon the veracity of this statement.

3.20 SUBCONTRACTING

Unless otherwise stipulated herein, the vendor shall not subcontract any portion of the work without the prior written consent of the County. Subcontracting without the prior consent of the County may result in termination of the contract for default.

3.21 ASSIGNMENT

The vendor shall not assign or transfer any contract resulting from this solicitation, including any rights, title or interest therein, or its power to execute such contract to any person, company or corporation without the prior written consent of the County. This provision specifically includes any acquisition or hostile takeover of the awarded vendor. Failure to comply in this regards may result in termination of the contract for default.

3.22 RESPONSIBILITY AS EMPLOYER

The employee(s) of the vendor shall be considered at all times its employee(s), and not an employee(s) or agent(s) of the County. The contractor shall provide employee(s) capable of performing the work as required. The County may require the contractor to remove any employee it deems unacceptable. All employees of the contractor may be required to wear appropriate identification.

3.23 INDEMNIFICATION

To the extent permitted by law, the vendor shall indemnify and hold harmless the County and its officers, employees, agents and instrumentalities from any and all liability, losses or damages, including attorney's fees and costs of defense, which the County or its officers, employees, agents or instrumentalities may incur as a result of claims, demands, suits, causes of actions or proceedings of any kind or nature arising out of, relating to or resulting from the performance of the agreement by the vendor or its employees, agents, servants, partners, principals or subcontractors. The vendor shall pay all claims and losses in connection therewith, and shall investigate and defend all claims, suits or actions of any kind or nature in the name of the County, where applicable, including appellate proceedings, and shall pay all costs, judgments, and attorney's fees which may be incurred thereon. The vendor expressly understands and agrees that any insurance protection required by this Agreement or otherwise provided by the vendor shall in no way limit the responsibility to indemnify, keep and save harmless and defend the County or its officers, employees, agents and instrumentalities as herein provided.

3.24 MODIFICATION OF CONTRACT

Any contract resulting from this solicitation may be modified by mutual consent of duly authorized parties, in writing through the issuance of a modification to the contract and/or purchase order as appropriate. This presumes the modification itself is in compliance with all applicable County procedures.

3.25 TERMINATION FOR CONVENIENCE

The County, at its sole discretion, reserves the right to terminate this contract upon thirty (30) days written notice. Upon receipt of such notice, the vendor shall not incur any additional costs under this contract. The County shall be liable only for reasonable costs incurred by the vendor prior to notice of termination. The County shall be the sole judge of "reasonable costs."

3.26 TERMINATION DUE TO UNAVAILABILITY OF CONTINUING FUNDING

When funds are not appropriated or otherwise made available to support continuation of performance in a current or subsequent fiscal year, the contract shall be cancelled and the vendor shall be reimbursed for the reasonable value of any non-recurring costs incurred amortized in the price of the supplies or services/tasks delivered under the contract.

3.27 TERMINATION FOR DEFAULT

The County reserves the right to terminate this contract, in part or in whole, or effect other appropriate remedy in the event the vendor fails to perform in accordance with the terms and conditions stated herein. The County further reserves the right to suspend or debar the vendor in accordance with the County ordinances, resolutions and/or administrative orders. The vendor will be notified by letter of the County's intent to terminate. In the event of termination for default, the County may procure the

required goods and/or services from any source and use any method deemed in its best interest. All re-procurement cost shall be borne by the vendor.

3.28 FRAUD AND MISREPRESENTATION

Any individual, corporation or other entity that attempts to meet its contractual obligations through fraud, misrepresentation or material misstatement, may be debarred for up to five (5) years. The County as a further sanction may terminate or cancel any other contracts with such individual, corporation or entity with such vendor held responsible for all direct or indirect costs associated with termination or cancellation, including attorney's fees.

3.29 RIGHT TO AUDIT

The COUNTY reserves the right to require CONTRACTOR to submit to an audit by any auditor of the COUNTY's choosing. CONTRACTOR shall provide access to all of its records which relate directly or indirectly to this Agreement at its place of business during regular business hours. CONTRACTOR shall retain all records pertaining to this Agreement and upon request make them available to the COUNTY for three (3) years following expiration of the Agreement. CONTRACTOR agrees to provide such assistance as may be necessary to facilitate the review or audit by the COUNTY to ensure compliance with applicable accounting and financial standards. Additionally, CONTRACTOR agrees to include the requirements of this provision in all contracts with subcontractors and material suppliers in connection with the work performed hereunder. If an audit inspection or examination pursuant to this section discloses overpricing or overcharges of any nature by the CONTRACTOR to the COUNTY in excess of one percent (1%) of the total contract billings, in addition to making adjustments for the overcharges, the reasonable actual cost of the COUNTY's audit shall be reimbursed to the COUNTY by the CONTRACTOR. Any adjustments and/or payments which must be made as a result of any such audit or inspection of the CONTRACTOR's invoices and/or records shall be made within a reasonable amount of time, but in no event shall the time exceed ninety (90) days, from presentation of the COUNTY's audit findings to the CONTRACTOR.

3.30 PUBLIC RECORDS/ COPYRIGHTS

All electronic files, audio and/or video recordings, and all papers pertaining to any activity performed by the vendor for or on behalf of the County shall be the property of the County and will be turned over to the County upon request. In accordance with Chapter 119, Florida Statutes, each file and all papers pertaining to any activities performed for or on behalf of the County are public records available for inspection by any person even if the file or paper resides in the vendor's office or facility. The vendor shall maintain the files and papers for not less than three (3) complete calendar years after the project has been completed or terminated, or in accordance with any grant requirements, whichever is longer. Prior to the close out of the Contract, the vendor shall appoint a records custodian to handle any records request and provide the custodian's name and telephone number(s) to the County. Any copyright derived from this Agreement shall belong to the author. The author and the CONSULTANT shall expressly assign to the COUNTY nonexclusive, royalty free rights to use any and all information provided by the CONSULTANT in any deliverable and/or report for the COUNTY's use which may include publishing in COUNTY documents and distribution as the COUNTY deems to be in the COUNTY's best interests. If anything included in any deliverable limits the rights of the COUNTY to use the information, the deliverable shall be considered defective and not acceptable and the CONSULTANT will not be eligible for any compensation.

3.31 GOVERNING LAWS

The interpretation, effect, and validity of any contract(s) resulting from this solicitation shall be governed by the laws and regulations of the State of Florida, and Lake County, Florida. Venue of any

court action shall be in Lake County, Florida. In the event that a suit is brought for the enforcement of any term of the contract, or any right arising there from, the parties expressly waive their respective rights to have such action tried by jury trial and hereby consent to the use of non-jury trial for the adjudication of such suit.

3.32 STATE REGISTRATION REQUIREMENTS

Any corporation submitting a bid in response to this ITB shall either be registered or have applied for registration with the Florida Department of State in accordance with the provisions of Chapter 607, Florida Statutes. A copy of the registration/ application may be required prior to award of a contract. Any partnership submitting a bid in response to this ITB shall have complied with the applicable provisions of Chapter 620, Florida Statutes. For additional information on these requirements, please contact the Florida Secretary of State's Office, Division of Corporations, 800.755.5111 (<http://www.dos.state.fl.us>).

3.33 PRIME CONTRACTOR

The vendor awarded the contract shall act as the prime contractor and shall assume full responsibility for successful performance of the contract. The vendor shall be considered the sole point of contact with regard to meeting all requirements of the contract. All subcontractors will be subject to advance review by the County in regards to competency and security concerns. After the award of the contract no change in subcontractors will be made without the consent of the County. The vendor shall be responsible for all insurance, permits, licenses, and related matters for any and all subcontractors. Even if the subcontractor is self-insured, the County may require the contractor to provide any insurance certificates required by the work to be performed.

3.34 FORCE MAJEURE

The parties will exercise every reasonable effort to meet their respective obligations hereunder, but shall not be liable for delays resulting from force majeure or other causes beyond their reasonable control, including, but not limited to, compliance with revisions to Government law or regulation, acts of nature, acts or omissions of the other party, fires, strikes, natural disasters, wars, riots, transportation problems and/or any other cause whatsoever beyond the reasonable control of the parties. Any such cause may be cause for appropriate extension of the performance period.

3.35 NO CLAIM FOR DAMAGES

No claim for damages or any claim other than for an extension of time shall be made or asserted against the County because of any delays. No interruption, interference, inefficiency, suspension, or delay in the commencement or progress of the Work shall relieve the vendor of duty to perform, or give rise to any right to damages or additional compensation from the County. The vendor's sole remedy shall be the right to seek an extension to the contract time. However, this provision shall not preclude recovery of damages by the vendor for hindrances or delays due solely to fraud, bad faith, or active interference on the part of the County.

3.36 TRUTH IN NEGOTIATION CERTIFICATE

For all agreements exceeding \$150,000, the firm awarded the agreement may be required to execute a truth in negotiation certificate stating that the wage rates and other factual unit costs are accurate, complete and current, at the time of contracting.

3.37 GRANT FUNDING

In the event any part of the contract is to be funded by federal, state, or other local agency monies, the vendor hereby agrees to comply with all requirements of the funding entity applicable to the use of the monies, including full application of requirements involving the use of minority firms, women's business enterprises, and labor surplus area firms. Vendors are advised that payments under the contract may be withheld pending completion and submission of all required forms and documents required of the vendor pursuant to the grant funding requirements.

ITB TITLE: Fire Apparatus**NOTES:**

- When purchasing on a direct basis, Lake County is exempt from all taxes (Federal, State, Local). A Tax Exemption Certificate will be furnished upon request for such purchases. **However, the vendor will be responsible for payment of taxes on all materials purchased by the vendor for incorporation into the project (see provision 3.8 for further detail)**
- The vendor shall not alter or amend any of the information (including, but not limited to stated units of measure, item description, or quantity) stated in the Pricing Section. If any quantities are stated in the pricing section as being "estimated" quantities, vendors are advised to review the "Estimated Quantities" clause contained in Section 3 of this solicitation.
- Any bid containing a modifying or "escalator" clause not specifically allowed for under the solicitation will not be considered.
- All pricing shall be FOB Destination unless otherwise specified in this solicitation document.
- All pricing submitted shall remain valid for a 90 day period. By signing and submitting a response to this solicitation, the vendor has specifically agreed to this condition.
- Vendors are advised to visit our website at <http://www.lakecountvfl.gov> and register as a potential vendor. Vendors that have registered on-line receive an e-mail notice when the County issues a solicitation matching the commodity codes selected by a vendor during the registration process.

ACKNOWLEDGEMENT OF ADDENDA**INSTRUCTIONS:** Complete Part I or Part II, whichever applies**Part I:**

The bidder must list below the dates of issue for each addendum received in connection with this ITB:

Addendum #1, Dated: 9/5/2013


Addendum #2, Dated: 9/10/2013

Addendum #3, Dated: _____

Addendum #4, Dated: _____

Part II:
☐ No Addendum was received in connection with this ITB.

PRICING SECTION

Item #	Item Description	Unit	Est. Qty	Unit Price	Extended Price
1.	Fire Apparatus, Triple Combination Pumper, per the preceding specifications	EA	1	\$ 259,312.00	\$ 259,312.00
2.	<p>State set percent above bidders net cost for the following:</p> <p>(The County reserves the right to audit invoices from manufacturers' suppliers to verify accuracy of percentages listed below.)</p> <p>Apparatus: 5 %</p> <p>Equipment Options: 12 %</p> <p>Apparatus Accessories: 12 %</p> <p>State percentage discount from identified price list(s) of the following:</p> <p>Cab/Chassis Parts: 10 %</p> <p>Price List <u>www.pierceparts.com</u></p> <p>Date of Price List <u>Web-based, current</u></p> <p>Body Parts: 10 %</p> <p>Price List <u>www.pierceparts.com</u></p> <p>Date of Price List <u>Web-based, current</u></p> <p>Bidder has included a complete description of apparatus construction?</p> <p>Yes <u>X</u> No <u> </u></p>				

<p>Nearest factory-authorized parts and service facility: <u>Ten-8 Fire Equipment, Inc.</u> <u>141 Maritime Drive</u> <u>Sanford, FL 32771</u></p> <p>Miles from facility to Groveland, Florida (34736): <u>47</u></p> <p>Name/Telephone/Cell/Pager Numbers of contact person: <u>Joe Hoffman, Manager</u> <u>(407) 328-5081 Office</u> <u>(407) 402-5103 Cell</u></p> <p>Attach any extended warranties offered and the yearly costs after all the initial warranties expire (noted in warranty section in the Special Terms and Conditions)</p> <p>Guaranteed delivery time for specified fire apparatus after receipt of purchase order: <u>240</u> Days (Calendar)</p> <p><u>Exceptions/Additions to specifications:</u> Note: it shall be unacceptable for any bidder to make the statement "see specifications" in lieu of listing all exceptions/additions from the preceding specifications. It shall also be unacceptable for any bidder to submit the manufacturer's literature in lieu of the above. ALL exceptions/additions to our specifications shall be either handwritten or typed on the bidders letterhead stationery and attached to their bid submittal.</p>				
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By Signing this Bid the Bidder Attests and Certifies that:

- It satisfies all legal requirements (as an entity) to do business with the County.
- The undersigned vendor acknowledges that award of a contract may be contingent upon a determination by the County that the vendor has the capacity and capability to successfully perform the contract.
- The bidder hereby certifies that it understands all requirements of this solicitation, and that the undersigned individual is duly authorized to execute this bid document and any contract(s) and/or other transactions required by award of this solicitation.

Certification Regarding Acceptance of County Electronic Payable Process

Vendor will accept payment using the County's VISA- based electronic payment system: ☐ Yes ☒ No

Purchasing Agreements with Other Government Agencies

This section is optional and will not affect contract award. If Lake County awarded you the proposed contract, would you sell under the same terms and conditions, for the same price, to other governmental agencies in the State of Florida? Each governmental agency desiring to accept to utilize this contract shall be responsible for its own purchases and shall be liable only for materials or services ordered and received by it. ☒ Yes ☐ No (Check one)

Certification Regarding Felony Conviction

Has any officer, director, or an executive performing equivalent duties, of the bidding entity been convicted of a felony during the past ten (10) years? ☐ Yes ☒ No (Check one)

Reciprocal Vendor Preference:

Vendors are advised the County has established, under Lake County Code, Chapter 2, Article VII, Sections 2-221 and 2-222, a process under which a local vendor preference program applied by another county may be applied in a reciprocal manner within Lake County. The following information is needed to support application of the Code:

1. Primary business location of the responding vendor (city/state): Appleton, Wisconsin
2. Does the responding vendor maintain a significant physical location in Lake County at which employees are located and business is regularly transacted: ☐ Yes ☒ No If "yes" is checked, provide supporting detail:

Conflict of Interest Disclosure Certification

Except as listed below, no employee, officer, or agent of the firm has any conflicts of interest, real or apparent, due to ownership, other clients, contracts, or interests associated with this project; and, this bid is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a proposal for the same services, and is in all respects fair and without collusion or fraud.

DUNS Number (Insert if this action involves a federal funded project): _____

General Vendor Information and Bid Signature:


Firm Name: Pierce Manufacturing, Inc.
 Street Address: 2600 American Drive, Appleton, WI, 54915
 Mailing Address (if different): _____
 Telephone No.: (920) 832-3231 Fax No.: (920) 832-3084 E-mail: rboggus@ten8fire.com
 FEIN No. 39 - 0139830 Prompt Payment Terms: 0 % 0 days, net 0
 Signature:  Date: 9/16/2013
 Print Name: Robert F. Boggus Title: Authorized Sales Representative

Award of Contract by the County: (Official Use Only)

By signature below, the County confirms award to the above-identified vendor under the above identified solicitation. A separate purchase order will be generated by the County to support the contract.

Vendor awarded as:

- ☒ Sole vendor ☐ Pre-qualified pool vendor based on price
☐ Pre-qualified pool vendor (spot bid) ☐ Primary vendor for items: _____
☐ Secondary vendor for items: _____ ☐ Other status: _____

Signature of authorized County official:  Date: 10-22-2013
 Printed name: DONNA G. VILLANIS Title: SENIOR CONTRACTING OFFICER
 Purchase Order Number assigned to this contract for billing purposes: _____

THE FOLLOWING DOCUMENTS ARE ATTACHED

Attachment 1: References – complete and submit in bid/proposal

REFERENCES

Agency	Volusia County Fire Services
Address	123 West Indiana Avenue
City,State,ZIP	Deland, FL 32720
Contact Person	Chief Jeff Smith
Telephone	(386) 736-5940
Date(s) of Service	Ongoing
Type of Service	Pierce Fire Apparatus
Comments:	Entire Pierce Fleet

Agency	St. Johns County Fire Rescue
Address	3657 Gaines Road
City,State,ZIP	St. Augustine, FL 32084
Contact Person	Chief Carl Shank
Telephone	(904) 209-1701
Date(s) of Service	Ongoing
Type of Service	Pierce Fire Apparatus
Comments:	Entire Pierce Fleet

Agency	City of Jacksonville Fire Rescue
Address	515 Julia Street
City,State,ZIP	Jacksonville, FL 32202
Contact Person	Chief Kurt Wilson
Telephone	(904) 219-2456
Date(s) of Service	Ongoing
Type of Service	Pierce Fire Apparatus
Comments:	Entire Pierce Fleet



LAKE COUNTY FLORIDA

OFFICE OF PROCUREMENT SERVICES
315 WEST MAIN STREET, SUITE 441
PO BOX 7800
TAVARES FL 32778-7800

PHONE: (352) 343-9839
FAX: 352) 343-9473

ADDENDUM NO. ONE
Date: September 5, 2013
ITB No. 14-0601
Fire Apparatus

It is the vendor's responsibility to ensure their receipt of all addenda, and to clearly acknowledge all addenda within their initial bid response. Acknowledgement may be confirmed either by inclusion of a signed copy of this addendum with the initial bid response, or by completion and return of the addendum acknowledgement section of the solicitation. Failure to acknowledge each addendum may prevent the bid from being considered for award.

This addendum does not change the date for receipt of bids.

The purpose of this addendum is to respond to questions received to date.

Questions and Answers:

Question 1: After a thorough review of your published specifications we have found that there is a contradiction between your aluminum body construction requirements listed on Page 20, paragraphs 4 and 5, and the construction requirements listed on Page 36 (Par. 13), Page 38 (Par. 1 under Tailboard, Page 44 (Par. 5 under Pull-Out Tray), and Page 55 (Par. 1 under Pump Compartment).

Answer 1: These components are attached directly to the frame of the vehicle, which is a steel frame. The amount of electrolysis is minimal on stepping surfaces. If aluminum braces were to be used on these components we would have dissimilar metals on the frames of the truck. The aluminum body has an aluminum sub frame however; there is rubber type mounting cushion between the body sub frame and the vehicle steel frame. So the dissimilar mettles don't make contact.

Question 1a: On Page 20 Par. 4 reads: "An all aluminum body per specifications is required. The body shall be extruded aluminum construction design. Formed plate construction is not acceptable."

Contradiction: The specifications listed on Pages 37, and 39 reflect formed plate construction with not one word mentioned in the specs about extruded construction. This contradicts your contract requirements as listed on Page 19 and construction requirements on Page 20.

Answer 1a: These are fine as well. Page 37 refers to hose bed components not attached to the body of the truck and the formed plate is an assumption being made by the manufacturer and is a generalization of the compartmentation construction.

Question 1b: On Page 20 Par. 5 reads: "Aluminum bodies mounted on steel sub-frames are not acceptable. To eliminate mixture of dissimilar metals, only aluminum sub-frames shall be considered."

Contradiction: The specifications' construction requirements as listed above (Pages 36, 38, 44, and 55) all require steel sub-frames or supports. Obviously this contradicts your contract requirements as listed on Page 19 and construction requirement on Page 20.

Our company builds the heaviest duty extruded aluminum body in the industry (meeting your requirements on Page 20). We also build a heavy duty modular body meeting and exceeding the construction requirements listed on Pages 36, 38, 44, and 55. We need to know which of these construction requirements is the bidder to be held to and by which all bids will be evaluated. Do the construction requirements on Page 20 take authority over those listed on the other indicated pages?

Answer 1b: They are both correct. Again, the sub-frame for the items mention above is preventing electrolysis at the frame.

Acknowledgement of Receipt of this Addendum:

Firm Name: PIERCE MFG. INC. Date: 9/13/13
Signature: Robert F. Boggas Title: Auth. Sales Rep.
Typed/Printed Name: ROBERT F. BOGGAS



LAKE COUNTY FLORIDA

OFFICE OF PROCUREMENT SERVICES
315 WEST MAIN STREET, SUITE 441
PO BOX 7800
TAVARES FL 32778-7800

PHONE: (352) 343-9839
FAX: 352) 343-9473

ADDENDUM NO. TWO
Date: September 10, 2013
ITB No. 14-0601
Fire Apparatus

It is the vendor's responsibility to ensure their receipt of all addenda, and to clearly acknowledge all addenda within their initial bid response. Acknowledgement may be confirmed either by inclusion of a signed copy of this addendum with the initial bid response, or by completion and return of the addendum acknowledgement section of the solicitation. Failure to acknowledge each addendum may prevent the bid from being considered for award.

This addendum does not change the date for receipt of bids.

The purpose of this addendum is to respond to questions received prior to the deadline and amend the ITB as noted.

Questions and Answers:

Question 2: On page 20 paragraphs 4 and 5 of the bid specs indicate only an all aluminum extruded body is acceptable. Addendum #1 references other areas in the specifications that call for a steel sub frame for the water tank and under the body compartments.

This requirement means the current body style purchased by Lake County for the past 15 years (a formed body), would not meet the current bid invitation. Further, the current supplier does not offer an extruded aluminum body. Was this your intention?

We build a body style that matches your current fleet out of aluminum and we also build an all extruded aluminum body as indicated on page 20.

An extruded body is more expensive than the current body style utilized in the fleet. A vendor that offers both body styles is at a price disadvantage if the current vendor supplies the current body style. Please clarify if an all aluminum extruded body is the only acceptable proposal or if a formed aluminum body to match the current fleet is acceptable.

Answer 2: To clarify the body requirement for vendors, the ITB document is being amended as follows.

Amendment to Specifications:

Section 2 – Statement of Work, Scope/Specifications - General, page 20, paragraph 4:

Change this paragraph from:

An all aluminum body per specifications is required. The body shall be extruded construction design. Formed plate construction is not acceptable.

TO:

An all aluminum body is required. The body shall be aluminum construction design. Formed plate construction is acceptable. All body structural tubing, angle, and channel metals are to be extruded aluminum.

Acknowledgement of Receipt of this Addendum:

Firm Name: PIERCE MFG. INC. Date: 9/15/13
Signature: Robert F. Boggus Title: AUTH. SALES REP
Typed/Printed Name: ROBERT F. BOGGUS



**LAKE COUNTY FIRE RESCUE
ITB 14-0601 FIRE APPARATUS
SEPTEMBER 18TH, 2013**

Base Model, Freightliner Pumper, Dealer Net	\$173,214.00
5% Mark-up on Base Model Apparatus	\$8,661.00
Apparatus Options (Apparatus Accessories) *	\$69,140.00
12% Mark-up on Apparatus Accessories	\$8,297.00
Equipment Options	\$0.00
12% Mark-up on Equipment Options	\$0.00

FINAL APPARATUS PRICE, F.O.B. Destination \$259,312.00

* All pricing for Pierce apparatus is generated through manufacturer's proprietary software, known as Pulse.

LAKE COUNTY FIRE RESCUE

PIERCE COMMERCIAL PUMPER

FREIGHTLINER FL106 CHASSIS

TEN-8 FIRE EQUIPMENT, INC. is pleased to submit a proposal to LAKE COUNTY FIRE RESCUE for a **Pierce® Freightliner commercial pumper** per your request for quotation. The following paragraphs will describe in detail the apparatus, construction methods, and equipment proposed. This proposal will indicate size, type, model and make of components parts and equipment, providing proof of compliance with each and every item (except where noted) in the departments advertised specifications.

PIERCE MANUFACTURING was founded in 1913. Since then we have been building bodies with one philosophy, "BUILD THE FINEST". Our skilled craftsmen take pride in their work, which is reflected, in the final product. We have been building fire apparatus since the early "forties" giving Pierce Manufacturing over 60 years of experience in the fire apparatus market. Pierce Manufacturing has built and put into service more than 51,000 apparatus, including more than 27,000 on Pierce custom chassis designed and built specifically for fire and emergency applications. Our Appleton, Wisconsin facility has over 757,000 total square feet of floor space situated on approximately 97 acres of land. Our Bradenton, Florida facility has 300,000 square feet of floor space situated on approximately 38 acres of land.

Our beliefs in high ethical standards are carried through in our commitments to all with whom we do business and our ethical standards do not change. Honesty, Integrity, Accountability and Citizenship are global tenets by which we all live and work. Consequently, we (nor our parent company) engage in or have been convicted of price fixing, bid rigging, or collusion in any domestic or international fire apparatus market.

Pierce has only one brand of fire apparatus "Pierce", ensuring you are receiving top of the line product that meets your specification.

In accordance with the current addition of NFPA 1901 standards, this proposal will specify whether the fire department, manufacturer, or apparatus dealership will provide required loose equipment.

GENERAL DESIGN AND CONSTRUCTION

To control quality, ensure compatibility, and provide a single source for service and warranty, the custom cab, chassis, pump module and body will be entirely designed, assembled/welded and painted in Pierce owned manufacturing facilities. This includes, but not limited to the cab weldment, the pump house module assembly, the chassis assembly, the body and the electrical system.

QUALITY AND WORKMANSHIP

Pierce has set the pace for quality and workmanship in the fire apparatus field. Our tradition of building the highest quality units with craftsmen second to none has been the rule right from the beginning and we demonstrate that ongoing commitment by: Ensuring all steel welding follows American Welding Society D1.1-2004 recommendations for structural steel welding. All aluminum welding follows American Welding society and ANSI D1.2-2003 requirements for structural welding of aluminum. All sheet metal welding follows American welding Society B2.1-2000 requirements for structural welding of sheet metal. Our flux core arc welding uses alloy rods, type 7000 and is performed to American Welding Society standards A5.20-F70T1. Furthermore, all employees classified as welders are tested and certified to meet the American welding Society codes upon hire and every three (3) years thereafter. Pierce also employs an American Welding Society certified welding inspector in plant during working hours to monitor weld quality.

Pierce Manufacturing operates a Quality Management System under the requirements of ISO 9001. These standards sponsored by the International Organization for Standardization (ISO) specify the quality systems that are established by the manufacturer for design, manufacture, installation and service. A copy of the certificate of compliance is included with this proposal.

In addition to the Quality Management system, we also employ a Quality Achievement Supplier program to insure the vendors and suppliers that we utilize meet the high standards we demand. That is just part of our overall "Quality at the Source" program at Pierce.

DELIVERY

The apparatus will be delivered under its own power to insure proper break-in of all components while the apparatus is still under warranty. A qualified delivery representative shall deliver the apparatus and remain for a sufficient length of time to instruct personnel in proper operation, care and maintenance of the equipment delivered.

MANUAL AND SERVICE INFORMATION

At time of delivery, complete operation and maintenance manuals covering the apparatus will be provided. A permanent plate will be mounted in the driver's compartment specifying the quantity and type of fluids required including engine oil, engine coolant, transmission, pump transmission lubrication, pump primer and drive axle.

SAFETY VIDEO

At the time of delivery Pierce will also provide one (1) 39-minute, professionally produced apparatus safety video, in DVD format. This video will address key safety considerations for personnel to follow when they are driving, operating, and maintaining the apparatus, including the following: vehicle pre-trip inspection, chassis operation, pump operation, aerial operation, and safety during maintenance.

PERFORMANCE TESTS

A road test will be conducted with the apparatus fully loaded and a continuous run of no less than ten (10) miles. During that time the apparatus will show no loss of power nor will it overheat. The transmission drive shaft or shafts and the axles will run quietly and be free of abnormal vibration or noise. The apparatus when fully loaded will not have less than 25 percent nor more than 50 percent on the front axle, and not less than 50 percent nor more than 75 percent on the rear axle. The apparatus will meet NFPA 1901 acceleration and braking requirements.

SERVICE AND WARRANTY SUPPORT

Pierce dealership support will be provided by TEN-8 FIRE EQUIPMENT, INC. by operating a Pierce authorized service center. The service center will have factory-trained mechanics on staff versed in Pierce fire apparatus. The service facility will be located within twenty five (25) miles of the fire department.

In addition to the dealership, Pierce has service facilities located in both, Weyauwega, Wisconsin and Bradenton, Florida. Pierce also maintains a dedicated parts facility of over 100,000 square feet in Appleton, Wisconsin. The parts facility stocks in excess of \$5,000,000 in parts dedicated to service and replacement parts. The parts facility employs a staff dedicated solely for the distribution and shipment of service and replacement parts.

Service parts for the apparatus being proposed can be found via Pierceparts.com which, is an interactive online tool that delivers information regarding your specific apparatus as well as the opportunity to register for training classes.

As a Pierce customer you have the ability to view the complete bill of materials for your specific apparatus, including assembly drawings, piece part drawings, and beneficial parts notations. You will also have the ability to search the complete Pierce item master through a parts search function which offers all Pierce SKU's and descriptions offered on all Pierce apparatus. Published component catalogs, which include proprietary systems along with an extensive operators manual library is available for easy reference.

Pierce Manufacturing maintains a dedicated service and warranty staff of over 35 personnel, dedicated to customer support, which also maintains a 24 hour 7 day a week toll free hot line, four (4) on staff EVTs, and offers hands-on repair and maintenance training classes multiple times a year.

CHASSIS

The chassis will be a Freightliner, Model M2, 106MD Conventional Chassis, supplied with the following equipment:

SEATING CAPACITY

The seating capacity in the cab will be five (5).

WHEELBASE

The wheelbase of the vehicle will be 237 inches.

GVW RATING

The gross vehicle weight rating will be 40,600 pounds.

FRAME

The frame rails will be formed from 120,000 psi yield, heat treated alloy steel.

FRAME LINER

A 0.25" inner frame reinforcement will be provided.

The frame section properties will be:

- Section Modulus: 26.50 cubic inch, per rail
- RBM: 3,200,000 pounds feet per inch, per rail
- Yield Strength: 120,000 pounds per square inch, per rail

FRONT AXLE

Front axle will be an "I" beam type, made of forged steel. It will be a Detroit brand axle, with a ground rating capacity of 16,000 pounds. Suspension or other components may limit the actual GAWR.

FRONT SUSPENSION

- Spring mounted
- Capacity at Ground: 14,600 lb.
- Shock Absorbers: Double Acting

Shock absorbers will be provided on the front axle.

REAR AXLE

The single reduction rear axle will be a Meritor™, Model RS-26-185, with a ground rating capacity of 26,000 lb.

The brake chambers will be forward mounted and the brakes will be 16.50" x 7.00", S-Cam type.

PARKING BRAKE

The parking brake will be spring set and located on the rear axle service brake.

REAR AXLE RATIO

A rear axle ratio will be furnished to allow the vehicle to reach a top speed of 68 MPH.

REAR SUSPENSION

The rear suspension will be spring mounted 11 leaf, 60.00" x 3.00" with a capacity at ground level of 26,000 lbs. Auxiliaries will be included and the deflection will be a variable rate.

DUST SHIELDS

The front and rear brakes will be provided with dust shields.

ANTI-LOCK BRAKE SYSTEM

The vehicle will be equipped with a Wabco, Model 4S/4M, four (4) channel anti-lock braking system. The ABS will provide anti-lock braking control on both the front and rear wheels. It will be a digitally controlled system that utilizes microprocessor technology to control the anti-lock braking system. Each wheel will be monitored by the system. When any particular wheel begins to lockup, a signal will be sent to the control unit. This control unit then will reduce the braking of that wheel for a fraction of a second and then reapply the brake. This anti-lock brake system will eliminate the lockup of any wheel thus helping to prevent the apparatus from skidding out of control.

FRONT BRAKES

The front brakes will be S-Cam, 16.50" x 6.00". The front brakes will be provided with Meritor™ automatic slack adjusters.

ENGINE EXHAUST BRAKE

An exhaust brake with an integral variable geometry turbo charger (VGT) will be provided. The control will be located on the instrument panel within easy reach of the driver.

AIR COMPRESSOR, BRAKE SYSTEM

The air compressor will be a Wabco with 18.7 cubic feet per minute output.

AIR DRYER

A Bendix AD-IP air dryer with a heater will be provided. Other features of this air dryer include:

- Desiccant style filter
- In-line filtration system
- Automatic drain valve

AIR INLET

A single air inlet with male coupling will be provided. It will allow station air to be supplied to the apparatus brake system through a shoreline hose. The inlet will be located on the driver side pump panel. A check valve will be provided to prevent reverse flow of air. The inlet will discharge into the "wet" tank of the brake system. A mating female coupling will also be provided with the loose equipment.

AIR OUTLET

One (1) air outlet will be installed with a female coupling and shut off valve, located on the driver side pump panel. This system will tie into the "wet" tank of the brake system and include an 85-psi pressure protection valve in the outlet line to prevent the brake system from losing all air.

Female coupling and male fitting will be .25" thread.

A mating male fitting will be provided with the loose equipment.

AIR TANK, ADDITIONAL

An additional air tank with 1454 cubic inch displacement will be provided to increase the capacity of the main air brake system. This tank will be plumbed into the rear half of the brake system.

The air tank will be primed and painted to meet a minimum 750 hour spray test. To reduce the effects of corrosion, the air tank will be mounted with stainless steel brackets.

The output flow of the engine air compressor will vary with engine rpm. Full compressor output will only be achieved at governed engine speed. Engine speed will be limited by generators, pumps and other PTO driven options.

ENGINE

- Model: Electronic Cummins ISL-350
- Number of Cylinders: Six (6)
- Displacement: 8.9 L
- Rated Brake Horsepower: 350 at 2000 rpm
- Peak Torque: 1000 at 1400 rpm
- Governed rpm: 2200
- Turbocharger
- Charge Air Cooled
- Fuel System: Hydraulically Actuated, Electronically Controlled Unit Injectors (HEUI)

ENGINE ACCESSORIES

- Air Cleaner: Dry type, with restriction indicator in cab
- Fuel Filters: Dual, with check valve
- Governor: Limiting speed type
- Lube Oil Cooler
- Lube Oil Filter: Full flow
- Starting Motor: 12-volt
- Oil Fill and Level Gauge

RADIATOR

- Pressurized System, Tube and Fin
- Deaeration Tank and Sight Glass
- Anti-Freeze Protection -30 Degrees Fahrenheit

AIR INTAKE, w/EMBER SEPARATOR

The air inlet will be equipped with a stainless steel mesh to separate water and burning embers from the air intake system such that particulate matter larger than 0.039" (1.0 mm) in diameter cannot reach the air filter element.

This will comply with NFPA 1901 and 1906 standards.

EXHAUST SYSTEM

The exhaust system will include a diesel particulate filter (DPF) and a selective catalytic reduction (SCR) device to meet current EPA standards. The DPF and SCR will be mounted horizontally outside of the frame rails in the passenger side front step area.

EXHAUST MODIFICATIONS

The exhaust will terminate the side of the body with a horizontal tailpipe and diffuser ahead of the passenger side rear wheels.

A heat deflector shield will be provided where the tail pipe is routed under any side compartmentation.

FUEL/WATER SEPARATOR

An Alliance fuel/water separator will be provided on the chassis.

FUEL PRIMER PUMP

A fuel primer pump will be included with the fuel water separator.

HIGH IDLE

A high idle switch will be provided on the instrument panel inside the cab. Activating the switch will cause the vehicle to automatically maintain a preset engine rpm.

The high idle switch will be operational only when the parking brake is on and the truck transmission is in neutral. A green indicator light will be provided adjacent to the switch. The light will be labeled "OK to Engage High Idle."

COOLANT LINES

Gates Blue Stripe rubber hose will be used for all engine coolant lines installed by Pierce Manufacturing.

Hose clamps will be the constant torque type to prevent coolant leakage. They will expand and contract according to coolant system temperature thereby keeping a constant clamping pressure on the hose.

FUEL TANK

A 50 gallon fuel tank will be provided and mounted at the left-hand cab step. The rectangular tank will be constructed of aluminum.

DIESEL EXHAUST FLUID TANK

A 6.00 gallon diesel exhaust fluid (DEF) tank will be provided and mounted on the driver's side, below the cab.

The tank will include an integrated heater unit that utilizes engine coolant to thaw the DEF in the event of freezing.

AUXILIARY FUEL COOLING SYSTEM

A supplementary fuel cooling system will be provided to allow the use of water from the discharge side of the pump for cooling the chassis engine fuel. The heat exchanger will be a cylindrical type and will be a separate unit. The cooler will operate any time the pump is discharging water and will be plumbed to the master drain valve.

TRANSMISSION

An Allison, model 3000 EVS, electronic torque converting automatic transmission will be provided.

Two (2) PTO openings will be located on left side and top of converter housing (positions 8 o'clock and 4 o'clock).

A transmission temperature gauge or warning light will be installed on cab instrument panel.

TRANSMISSION SHIFT CONTROL

A push button shift module will be mounted to right of driver. Shift position indicator will be indirectly lit for after dark operation.

The transmission will be a five (5)-speed. The transmission ratios will be 1st - 3.49 to 1.00, 2nd - 1.86 to 1.00, 3rd - 1.41 to 1.00, 4th - 1.00 to 1.00, 5th - 0.75 to 1.00, R - 5.03 to 1.00.

TRANSMISSION COOLER

A transmission oil cooler will be provided in the lower tank of the radiator.

DRIVELINE

Drivelines will have a heavy duty metal tube that is properly sized for the intended application. The shafts will have a splined slip joint.

STEERING

The steering system will be hydraulically driven. The steering column will have an adjustable tilt and telescope feature.

TIRES, FRONT

Front tires will be Goodyear, 12R22.50, radial tires with a tread pattern suitable for the steering axle position. The tire capacity will meet or exceed the capacity of the axle and/or suspension.

WHEELS, FRONT

Wheels for the front axle will be 22.50" x 8.25" aluminum disc, ten (10)-hole pattern.

TIRES, REAR

Rear tires will be Goodyear 12R22.50 radial tires with a traction tread pattern suitable for the drive axle position. The tires will meet or exceed the weight rating of the axle and/or suspension.

WHEELS, REAR

The rear wheels will be aluminum 22.50" x 8.25" disc with a ten (10)-hole pattern.

TIRE PRESSURE MANAGEMENT

There will be a VECSAFE LED tire alert pressure management system provided that will monitor each tire's pressure. A chrome plated brass sensor will be provided on the valve stem of each tire for a total of six (6) tires.

The sensor will calibrate to the tire pressure when installed on the valve stem for pressures between 20 and 120 psi. The sensor will activate an integral battery operated LED when the pressure of that tire drops eight (8) psi.

Removing the cap from the sensor will indicate the functionality of the sensor and battery. If the sensor and battery are in working condition, the LED will immediately start blinking.

WHEEL CHOCKS

There will be one (1) pair of folding Ziamatic SAC-44-E, aluminum alloy, Quick-Choc wheel blocks, with easy-grip handle provided.

WHEEL CHOCK BRACKETS

There will be one (1) pair of Ziamatic SQCH-44-H style horizontal mounting wheel chock brackets provided for the Ziamatic SAC-44-E folding wheel chocks. The brackets will be made of aluminum and consist of a quick release spring loaded rod to hold the wheel chocks in place. The brackets will be mounted in a body compartment.

MUD FLAPS

Mud flaps with a Pierce logo will be installed behind the rear wheels.

CAB

A 4-door, high-roof cab will be provided. The cab and doors will be of an aluminum construction.

Exterior Styling

Aerodynamic hood and windshield

Tinted Glass in all Windows

Fiberglass hood with mounted plastic grille

Single 63"x14" rear window

Interior

Air bag rear cab suspension

Gray vinyl mats

Forward roof mounted console

Two (2) dash-mounted cup holders, right-hand and left-hand

Gray Vinyl Upholstery

Dual Sunvisors

Fresh Air Heater and Defroster

- Gray Vinyl Upholstery

WIPER CONTROL

Wiper control will include an intermittent feature and windshield washer controls.

CAB GRILLE, INTERIOR CONVENIENCE and EXTERIOR APPEARANCE PACKAGE

The cab exterior will have a high impact plastic chromed grille and matching headlight bezels. The grille will tilt with the hood.

Additionally, the headlight bezels and the engine air intake housing will have a chrome finish.

The cab interior will include black dash panels, molded door panels with vinyl inserts and brushed aluminum door kick plates.

CAB ACCESS STEPS

The cab access steps will be provided by the apparatus manufacturer. The steps will be a two (2) step design fabricated from bright aluminum treadplate. The step assembly will enclose the area under the cab. The fuel tank fill cap will be exposed for refueling if located under the cab. Access will be provided to inspect the chassis batteries when located under the cab.

COMPARTMENT, STORAGE

A storage compartment will be provided under the driver's and passenger's side crew cab doors.

The compartments will be constructed of aluminum treadplate with single pan drop-down door.

The inside dimensions of the passenger's side compartment will be 36.00" wide x 17.25" high x 17.50" deep. The inside dimensions of the driver's side compartment will be 32.00" wide x 17.25" high x 17.50" deep.

MIRRORS

West Coast style heated, remote operated mirrors constructed from a molded composite material with a bright finish will be provided. A heated 8.00" convex mirror shall be included below the primary mirrors. An auxiliary down view mirror will be included on the passenger side.

BUMPER

A one (1) piece, 10.00" high, stainless steel bumper will be attached to the front of the frame.

A 9.00" channel will be mounted directly behind the bumper for additional strength.

The bumper will be extended 16.00" from the front face of the cab.

HOSE TRAY

A hose tray, constructed of aluminum, will be placed in the center of the bumper extension.

The tray will have a capacity of 100' of 1.75" double jacket cotton-polyester hose.

Black rubber grating will be provided at the bottom of the tray. Drain holes are also provided.

GRAVEL PAN

A gravel pan, constructed of bright aluminum treadplate, will be furnished between the bumper and cab face. The gravel pan will be properly supported from the underside to prevent flexing and vibration of the aluminum treadplate.

BUMPER HOSE RESTRAINT

There will be one (1) hose tray restraint straps located center

The restraints will be a pair of 2.00" wide black nylon straps with Velcro fasteners provided. The strap(s) will be used to secure the hose in the tray.

TOW HOOKS

Two (2) chromed steel tow hooks will be installed under the bumper and attached to the front frame members. The tow hooks will be designed and positioned to allow up to a 6,000 pound straight horizontal pull in line with the centerline of the vehicle. The tow hooks will not be used for lifting of the apparatus.

SEATING

Seating inside the cab will consist of a Seats Inc. air-ride driver seat and a non-suspension Seats Inc. 911 SCBA officer seat.

SEATING (crew cab)

Three (3) individual Seats Inc. #911 SCBA style seats will be provided inside the crew cab.

SEAT BELT WEB LENGTH

The chassis seat belt web length as supplied by the commercial chassis manufacturer will be compliant to NFPA 14.1.3.2 and 14.1.3.3.

SEAT BELTS

All seating positions in the cab and crew cab will have highly visible (orange) seat belts.

SEAT BELT MONITORING SYSTEM

A seat belt monitoring system (SBMS) will be provided. The SBMS will be capable of monitoring up to ten (10) seat positions indicating the status of each seat position with a green or red LED indicator as follows:

Seat Occupied	Buckled	Green
Seat Occupied	Unbuckled	Red
No Occupant	Buckled	Red
No Occupant	Unbuckled	Not Illuminated

Alarm:

The SBMS will include an audible alarm that will be activated when a red illumination condition exists and the parking brake is released, or a red illumination condition exists and the transmission is not in park.

AIR BOTTLE HOLDERS

A Ziamatic, Model ULLII, SCBA holder will be mounted in the back rest of the SCBA seat. This bracket will be compliant with NFPA 1901-04 Section 14.1.10.1 and will include a backplate, two (2) seats, a footplate and the model LLS (Load & Lock) strap to hold the bottle in the bracket. The bracket seats will be a one (1) size fits all style seat and will accommodate SCBA cylinders from the high pressure 30 minute to the high pressure 60 minute. Seats will be adjustable up and down by unbolting, relocating, and re-bolting in the desired position. There will be a quantity of three (3).

ENGINE COMPARTMENT LIGHTS

Two (2) engine compartment lights will be installed under the engine hood, of which the switches are an integral part.

STEP LIGHTS

There will be eight (8) white LED step lights provided. There will be two (2) lights installed at each cab and crew cab door, one (1) light per doorstep.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

The lights will be activated when the adjacent door is opened.

AIR CONDITIONING WITH AUXILIARY UNIT

An air conditioner will be provided that is integral with heater and defroster system. In addition, another evaporator core will be provided for more cooling capacity in the crew cab.

CAB INSTRUMENTS

- Engine Temperature Gauge and Warning Buzzer
- Engine Oil Pressure Gauge and Warning Buzzer
- Speedometer with Odometer
- Engine Tachometer
- Engine Hourmeter
- Fuel Level Gauge
- Voltmeter: Low voltage red warning light and audible alarm
- Air Brake Pressure Gauge
- Air Restriction Indicator
- Circuit Breakers: For overload protection of electric circuits
- Ignition Switch: Keyless type

STORAGE CONSOLE

There will be a console located between the front seats with room for map storage, the siren head and a radio. There will be four (4) sections for map storage to the rear of the console. Each map storage section will be approximately 4.00" wide x 13.00" long x 12.25" deep. The console will be constructed of smooth aluminum and painted black.

BATTERY SYSTEM

A single starting battery system will be provided consisting of three (3)-12 volt, 1031, 760CCA, maintenance-free, group 31 batteries. The batteries system will have a total of 2280 cold cranking amps.

JUMP START CONNECTIONS

Positive and negative posts for jump starting will be provided by the chassis manufacturer. They will be frame mounted and located under the hood.

BATTERY SYSTEM MODIFICATION

Due to specific apparatus configuration requirements, the batteries will be relocated to the cargo area by the Pierce. An enclosure with an access panel shall protect the batteries.

MASTER BATTERY SWITCH

A master battery switch, to activate the battery system, will be provided inside the cab within easy reach of the driver.

The master battery disconnect switch will be wired between the starter solenoid and the remainder of the electrical loads on the apparatus.

A green "battery on" indicator light, visible from the driver's position, will be provided.

BATTERY CHARGER/ AIR COMPRESSOR

A Kussman Pump Plus 1200, model 091-9-1200 single output battery charger/air compressor system will be provided. A display bar graph indicating the state of charge will be included.

The automatic charger will maintain one (1) set of batteries with a maximum output current of 40 amps.

The 12-volt air compressor will be installed to maintain the air system pressure when the vehicle is not in use.

The battery charger will be wired to the AC shoreline inlet through an AC receptacle adjacent to this battery charger.

Battery charger/compressor will be located in the front left body compartment.

The battery charger indicator will be located on the driver's seat riser.

SHORELINE INLETS

There will be one (1) shoreline receptacle provided to operate the dedicated 120 volt circuits on the truck without the use of a generator.

The shoreline receptacle(s) will be provided with a NEMA 5-20, 120 volt, 20 amp, straight blade Kussmaul Super auto eject plug with a yellow weatherproof cover. The cover is spring loaded to close, preventing water from entering when the shoreline is not connected.

The unit is completely sealed to prevent road dirt contamination.

A solenoid wired to the vehicle's starter is energized when the engine is started. This instantaneously drives the plug from the receptacle.

An internal switch arrangement will be provided to disconnect the load prior to ejection to eliminate arcing of the connector contacts.

The shoreline will be connected to the onboard battery charger.

A mating connector body will be supplied with the loose equipment.

The shoreline receptacle will be located on the driver side of pump panel.

BATTERY CHARGER COVER

A cover will be fabricated and installed over the battery charger for protection.

Locate in compartment D3, for charger & compressor (spatter painted).

ALTERNATOR

The alternator will be a Delco Remy 40SI, 275 amp, quadra-mount, with remote battery voltage sensor.

ELECTRICAL WIRING DIAGRAMS

Two (2) electrical wiring diagrams, prepared for the body as it interfaces with the commercial chassis, will be provided.

RADIO ANTENNA MOUNT

There will be two (2) standard 1.125", 18 thread antenna-mounting base(s) installed on the cab roof with high efficiency, low loss, coaxial cable(s) routed to the console. A weatherproof cap will be installed on the mount.

SPARE CIRCUIT

There will be one (1) pair of wires, including a positive and a negative, installed on the apparatus.

The above wires will have the following features:

- The positive wire will be connected directly to the battery power.

- The negative wire will be connected to ground.

- Wires will be protected to 30 amps at 12 volts DC.

- Power and ground will terminate in the center console.

- Termination will be with six (6) position terminal strip.

Wires will be sized to 125% of the protection.

This circuit(s) may be load managed when the parking brake is set.

SPARE CIRCUIT

There will be one (1) pair of wires, including a positive and a negative, installed on the apparatus.

The above wires will have the following features:

The positive wire will be connected directly to the battery switched power.

The negative wire will be connected to ground.

Wires will be protected to 30 amps at 12 volts DC.

Power and ground will terminate on the forward body bulkhead wall of the P3 compartment up as high as possible.

Termination will be with six (6) position terminal strip.

Wires will be sized to 125% of the protection.

This circuit(s) may be load managed when the parking brake is set.

SPARE CIRCUIT

There will be two (2) pair of wires, including a positive and a negative, installed on the apparatus.

The above wires will have the following features:

- The positive wire will be connected directly to the battery power.
- The negative wire will be connected to ground.
- Wires will be protected to 15 amps at 12 volts DC.
- Power and ground will terminate on the center console.
- Termination will be with 15 amp, power point plug with rubber cover.

Wires will be sized to 125 percent of the protection.

The circuit(s) may be load managed when the parking brake is set.

ELECTRONIC LOAD MANAGEMENT

A Kussmaul Load Manager 2 will be provided on the apparatus. The device is an electronic load management (ELM) system that monitors the vehicle's 12-volt electrical system, and automatically reduces the electrical load in the event of a low voltage condition and by doing so, ensures the integrity of the electrical system.

The ELM will monitor the vehicle's voltage while at the scene (parking brake applied). It will sequentially shut down individual electrical loads when the system voltage drops below a preset value. Two (2) separate electrical loads will be controlled by the load manager. The ELM will sequentially re-energize electrical loads as the system voltage recovers.

VEHICLE DATA RECORDER

A vehicle data recorder (VDR) will be provided. The VDR will be capable of reading and storing vehicle information. The VDR will be capable of operating in a voltage range from 8VDC to 16VDC. The VDR will not interfere with, suspend, or delay any communications that may exist on the CAN data link during the power up, initialization, runtime, or power down sequence. The VDR will continue operation upon termination of power or at voltages below 8VDC for a minimum of 10ms.

The information stored on the VDR can be downloaded through a USB port mounted in a convenient location determined by cab model. A CD provided with the apparatus will include the programming to download the information from the VDR. A USB cable can be used to connect the VDR to a laptop to retrieve required information.

The vehicle data recorder will be capable of recording the following data via hardwired and/or CAN inputs:

Vehicle Speed - MPH

Acceleration - MPH/sec

Deceleration - MPH/sec

Engine Speed - RPM

Engine Throttle Position - % of Full Throttle

ABS Event - On/Off

Seat Occupied Status - Yes/No by Position (1-6 Seating Capacity)

Seat Belt Buckled Status - Yes/No by Position (1-6 Seating Capacity)

Master Optical Warning Device Switch - On/Off

Time - 24 Hour Time

Date - Year/Month/Day

AMP DRAW REPORT

The bidder will provide, at the time of bid and delivery, an itemized print out of the expected amp draw of the entire vehicle's electrical system.

The manufacturer of the apparatus will provide the following:

- 1) Documentation of the electrical system performance tests.
- 2) A written load analysis, which will include the following:
 - A) The nameplate rating of the alternator.
 - B) The alternator rating under the conditions specified per:
Applicable NFPA 1901 or 1906 (Current Edition).
 - C) The minimum continuous load of each component that is specified per:
Applicable NFPA 1901 or 1906 (Current Edition).
 - D) Additional loads that, when added to the minimum continuous load, determine the total connected load.
 - E) Each individual intermittent load.

All of the above listed items will be provided by the bidder per the applicable NFPA 1901 or 1906 (Current Edition).

EXTERIOR LIGHTING

Exterior lighting will meet or exceed Federal Department of Transportation, Federal Motor Vehicle Safety Standards and National Fire Protection Association requirements in effect at this time.

Front headlights will be halogen type and comply with all FMVSS requirements.

Five (5) LED clearance/marker lights will be installed across the leading edge of the cab.

WARNING LIGHTS (Cab Face)

A pair of flush mounted, Whelen model 60*021R, flashing Super LED lights will be provided on the cab face.

The color of these lights will be red Super LED/red lens.

These lights will meet or exceed the NFPA required optical light output for the front lower zone.

A switch will be provided inside the cab on the switch panel for actuation.

These lights will be installed with a flange.

Any white light will be deactivated when the parking brake is applied.

BACK-UP ALARM

A PRECO, Model 1040, solid-state electronic audible back-up alarm that actuates when the truck is shifted into reverse will be provided. The device will sound at 60 pulses per minute and automatically adjust its volume to maintain a minimum ten (10) dBA above surrounding environmental noise levels.

WATER TANK

Booster tank will have a capacity of 1000 gallons and be constructed of polypropylene plastic by United Plastic Fabricating, Incorporated.

Tank joints and seams will be nitrogen welded inside and out.

Tank will be baffled in accordance with NFPA Bulletin 1901 requirements.

Baffles will have vent openings at both the top and bottom to permit movement of air and water between compartments.

Longitudinal partitions will be constructed of .38" polypropylene plastic and will extend from the bottom of the tank through the top cover to allow for positive welding.

Transverse partitions will extend from 4.00" off the bottom of the tank to the underside of the top cover.

All partitions will interlock and will be welded to the tank bottom and sides.

Tank top will be constructed of .50" polypropylene. It will be recessed .38" and will be welded to the tank sides and the longitudinal partitions.

Tank top will be sufficiently supported to keep it rigid during fast filling conditions.

Construction will include 2.00" polypropylene dowels spaced no more than 30.00" apart and welded to the transverse partitions. Two (2) of the dowels will be drilled and tapped (.50" diameter, 13.00" deep) to accommodate lifting eyes.

A sump that is 8.00" long x 8.00" wide x 6.00" deep will be provided at the bottom of the water tank.

Sump will include a drain plug and the tank outlet.

Tank will be installed in a fabricated cradle assembly constructed of structural steel.

Sufficient cross members will be provided to properly support bottom of tank. Cross members will be constructed of steel bar channel or rectangular tubing.

Tank will "float" in cradle to avoid torsional stress caused by chassis frame flexing. Rubber cushions, .50" thick x 3.00" wide, will be placed on all horizontal surfaces that the tank rests on.

Stops or other provision will be provided to prevent an empty tank from bouncing excessively while moving vehicle.

Mounting system will be approved by the tank manufacturer.

Fill tower will be constructed of .50" polypropylene and will be a minimum of 8.00" wide x 14.00" long.

Fill tower will be furnished with a .25" thick polypropylene screen and a hinged cover.

An overflow pipe, constructed of 4.00" schedule 40 polypropylene, will be installed approximately halfway down the fill tower and extend through the water tank and exit to the rear of the rear axle.

HOSE BED

The hose body will be fabricated of .125"-5052 aluminum with a nominal 38,000 psi tensile strength.

The hose body width will be 68.00" inside and the upper and rear edges of side panels have a double break for rigidity.

The upper inside area of the beavertails will be covered with brushed stainless steel to prevent damage to painted surface when hose is removed.

The flooring of the hose bed will be removable aluminum grating with the top surface corrugated to aid in hose aeration. The grating slats will be .50" x 4.50" with spacing between the slats for hose ventilation.

Hose bed will accommodate 400' of 3" DJ and 1000' of 5" LDH.

HOSE BED DIVIDER

One (1) adjustable hosebed divider will be furnished for separating hose.

Each divider will be constructed of a .125" brushed aluminum sheet fitted and fastened into a slotted, 1.50" diameter radiused extrusion along the top, bottom, and rear edge.

Divider will be fully adjustable by sliding in tracks, located at the front and rear of the hose bed.

Divider will be held in place by tightening bolts, at each end.

Acorn nuts will be installed on all bolts in the hose bed which have exposed threads.

HOSEBED HOSE RESTRAINT

The hose in the hosebed will be restrained by a black nylon Velcro strap at the top of the hosebed. At the rear of the hosebed, 2.00" black nylon webbing with a 1.50" x 4.00" box pattern will attach at the top rear outside corners with seat belt buckle fasteners. The webbing will have straps connected with seat belt buckle fasteners located at the rear body sheet below the hosebed.

RUNNING BOARDS

Running boards will be fabricated of .125" bright aluminum treadplate.

Each running board will be supported by a welded 2.00" square tubing and channel assembly, which will be bolted to the pump compartment substructure.

Running boards will be 12.75" deep and spaced .50" away from the pump panel.

A splashguard will be provided above the running board treadplate.

TAILBOARD

The tailboard will also be constructed of .125" bright aluminum treadplate and spaced .50" from the body, as well as supported by a structural steel assembly.

The tailboard area will be 24.00" deep in the center area and 8.00" deep to the rear of the side compartments. The tailboard will be T-shaped.

The exterior side will be flanged down and in for increased rigidity of tailboard structure.

REAR WALL, SMOOTH ALUMINUM/BODY MATERIAL

The rear facing surfaces of the center rear wall will be smooth aluminum.

The rear facing surfaces of the bulkheads, the surface to the rear of the side body compartments, will be smooth and the same material as the body.

Any inboard facing surfaces below the height of the hosebed will be bright aluminum treadplate.

TOW BAR

A tow bar will be installed under the tailboard at center of truck.

Tow bar will be fabricated of 1.00" CRS bar rolled into a 3.00" radius.

Tow bar assembly will be constructed of .38" structural angle. When force is applied to the bar, it will be transmitted to the frame rail.

Tow bar assembly will be designed and positioned to allow up to a 30-degree upward angled pull of 17,000 lb., or a 20,000 lb. straight horizontal pull in line with the centerline of the vehicle.

Tow bar design will have been fully tested and evaluated using strain gauge testing and finite element analysis techniques.

COMPARTMENTATION

Body and compartments will be fabricated of .125", 5052-H32 aluminum.

Side compartments will be an integral assembly with the rear fenders.

Circular fender liners will be provided for prevention of rust pockets and ease of maintenance.

Compartment flooring will be of the sweep out design with the floor higher than the compartment door lip.

The compartment door opening will be framed by flanging the edges in 1.75" and bending out again .75" to form an angle.

Drip protection will be provided above the doors by means of bright aluminum extrusion, formed bright aluminum treadplate or polished stainless steel.

The top of the compartment will be covered with bright aluminum treadplate rolled over the edges on the front, rear and outward side. These covers will have the corners welded.

Side compartment covers will be separate from the compartment tops.

Front facing compartment walls will be covered with bright aluminum treadplate.

All screws and bolts which protrude into a compartment will have acorn nuts on the ends to prevent injury.

AGGRESSIVE WALKING SURFACE

All exterior surfaces designated as stepping, standing, and walking areas will comply with the required average slip resistance of the current NFPA standards.

LOUVERS

Louvers will be stamped into compartment walls to provide the proper airflow inside the body compartments and to prevent water from dripping into the compartment. Where these louvers are provided, they will be formed into the metal and not added to the compartment as a separate plate.

COMPARTMENTATION, DRIVER'S SIDE

A full height, roll-up door compartment ahead of the rear wheels will be provided. The interior dimensions of this compartment will be 44.00" wide x 58.25" high x 25.88" deep in the lower 26.00" of the compartment and 12.00" deep in the remaining upper portion. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The compartment interior will be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment will be 38.25" wide x 58.25" high.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

A roll-up door compartment over the rear wheels will be provided. The interior dimensions of this compartment will be 66.50" wide x 25.38" high x 12.00" deep. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The clear door opening of this compartment will be 58.25" wide x 25.12" high.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

A full height, roll-up door compartment behind the rear wheels will be provided. The interior dimensions of this compartment will be 47.50" wide x 58.25" high x 12.00" deep. A section of this compartment will be 25.88" deep x 47.50" wide x 26.00" high directly behind the rear wheels. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The compartment interior will be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment will be 44.75" wide x 58.25" high.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

COMPARTMENTATION, PASSENGER'S SIDE

A full height, roll-up door compartment ahead of the rear wheels will be provided. The interior dimensions of this compartment will be 44.00" wide x 58.25" high x 25.88" deep in the lower 26.00" of the compartment and 12.00" deep in the remaining upper portion. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The compartment interior will be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment will be 38.25" wide x 58.25" high. Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

A roll-up door compartment over the rear wheels will be provided. The interior dimensions of this compartment will be 66.50" wide x 25.38" high x 12.00" deep. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The clear door opening of this compartment will be 58.25" wide x 25.12" high. Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

A full height, roll-up door compartment behind the rear wheels will be provided. The interior dimensions of this compartment will be 47.50" wide x 58.25" high x 12.00" deep. A section of this compartment will be 25.88" deep x 47.50" wide x 26.00" high directly behind the rear wheels. The height of the compartment will be measured from the compartment floor to the bottom edge of the door roll. The depth of the compartment will be calculated with the compartment door closed. The compartment interior will be fully open from the compartment ceiling to the compartment floor and designed so that no permanent dividers are required between the upper and lower sections. The clear door opening of this compartment will be 44.75" wide x 58.25" high.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

ROLLUP DOOR, SIDE COMPARTMENTS

There will be six (6) compartment doors installed on the side compartments. The doors will be double faced aluminum construction, painted one (1) color to match the lower portion of the body and manufactured by A&A Manufacturing (Gortite).

Lath sections will be an interlocking rib design and will be individually replaceable without complete disassembly of door.

Between each slat at the pivoting joint will be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals will allow door to operate in extreme temperatures ranging from plus 180 to minus 40 degrees Fahrenheit. Side, top and bottom seals will be provided to resist ingress of dirt and weather and be made of Santoprene.

All hinges, barrel clips and end pieces will be nylon 66. All nylon components will withstand temperatures from plus 300 to minus 40 degrees Fahrenheit.

A polished stainless steel lift bar with locking key latches to be provided for each roll-up door. The keys to be Model 1250 for all compartment doors. Lift bar will be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge will be supplied over lift bar for additional area to aid in closing the door.

Doors will be constructed from an aluminum box section. The exterior surface of each slat will be flat. The interior surfaces will be concave to provide strength and prevent loose equipment from jamming the door from inside.

To conserve space in the compartments, the spring roller assembly will not exceed 3.00" in diameter.

The header for the rollup door assembly will not exceed 4.00".

A heavy-duty magnetic switch will be used for control of open compartment door warning lights.

PUMP TEST

The rated water pump will be tested, approved, and certified by an ISO certified independent third party testing agency at the manufacturer's expense. The test results, along with the pump manufacturer's certification of hydrostatic test, the engine manufacturer's certified brake horsepower curve, and the manufacturer's record of pump construction details will be forwarded to the Fire Department.

APPROVAL DRAWING

A drawing of the proposed apparatus will be prepared and provided to the purchaser for approval before construction begins. The Pierce sales representative will also be provided with a copy of the same drawing. The finalized and approved drawing will become part of the contract documents. This drawing will indicate the chassis make and model, location of the lights, siren, horns, compartments, major components, etc.

A "revised" approval drawing of the apparatus will be prepared and submitted by Pierce to the purchaser showing any changes made to the approval drawing.

COMPARTMENTATION, REAR

A roll-up door compartment above the rear tailboard will be provided.

Interior dimensions of this compartment will be 40.00" wide x 54.13" high x 25.88" deep in the lower 45.25" of height and 15.75" deep in the remaining upper portion. Depth of the compartment will be calculated with the compartment door closed.

A louvered, removable access panel will be furnished on the back wall of the compartment.

Rear compartment will be open into the rear side compartments.

Clear door opening of this compartment will be 33.25" wide x 45.25" high.

Closing of the door will not require releasing, unlocking, or unlatching any mechanism and will easily be accomplished with one hand.

ROLL-UP DOOR, REAR COMPARTMENT

There will be a rear roll up door. The door will be double faced aluminum construction, an anodized satin finish and manufactured by A&A Manufacturing (Gortite).

Lath sections will be an interlocking rib design and will be individually replaceable without complete disassembly of door.

Between each slat at the pivoting joint will be a PVC inner seal to prevent metal to metal contact and prevent dirt or moisture from entering the compartments. Seals will allow door to operate in extreme temperatures ranging from plus 180 to minus 40 degrees Fahrenheit. Side, top and bottom seals will be provided to resist ingress of dirt and weather and be made of Santoprene.

All hinges, barrel clips and end pieces will be nylon 66. All nylon components will withstand temperatures from plus 300 to minus 40 degrees Fahrenheit.

A polished stainless steel lift bar with locking key latches to be provided for each roll-up door. The keys to be Model 1250 for all compartment doors. Lift bar will be located at the bottom of door and have latches on the outer extrusion of the doors frame. A ledge will be supplied over lift bar for additional area to aid in closing the door.

Door will be constructed from an aluminum box section. The exterior surface of each slat will be flat. The interior surface will be concave to provide strength and prevent loose equipment from jamming the door from inside.

To conserve space in the compartments, the spring roller assembly will not exceed 3.00" in diameter.

The header for the roll-up door assembly will not exceed 4.00".

A heavy-duty magnetic switch will be used for control of open compartment door warning lights.

PULL-OUT TRAY

There will be two (2) slide-out trays with 2.00" sides and a capacity of 500 pounds provided. Capacity rating will be in the extended position.

Slides (a minimum of two per tray) will be an under mount-roller bearing type rated at 500lbs per pair with a factor of safety of 2.

To ensure years of dependable service the slides will be coated with a finish that is tested to withstand a minimum of 1,000 hours of salt spray per ASTM B117.

To ensure years of easy operation, the slides will require no more than a 50 pound force for push-in or pull-out movement when fully loaded after having been subjected to a 40 hour vibration (shaker) test under full load. The vibration drive file will have been generated from accelerometer data collected from a heavy truck chassis driven over rough gravel roads in an unloaded condition. Proof of compliance will be provided upon request.

Automatic locks will be provided for both the "in" and "out" positions. The trip mechanism for it will be located at the front of the tray for ease of use with a gloved hand.

Tray location will be in R1 and P1.

Heavy-duty steel angle iron assembly will support the body under the compartment floor. It will be attached to the chassis frame for load transfer and to reduce stress on body.

PULL-OUT ADJUSTABLE HEIGHT TRAY

There will be one (1) slide-out tray with 2.00" sides and a capacity of 500 pounds provided. Capacity rating will be in the extended position.

Slides will be Jonathan brand with ball bearings for ease of operation and years of dependable service.

Tray location will be in R1.

Automatic locks will be provided for both the "in" and "out" positions. The trip mechanism for it will be located at the front of the tray for ease of use with a gloved hand.

Each tray will be adjustable up and down within the compartment.

ADJUSTABLE SHELVES

There will be six (6) shelves with a capacity of 500 pounds provided. The shelf construction will consist of .188" aluminum with 2.00" sides. Each shelf will be painted to match the compartment interior. Each shelf will be infinitely adjustable by means of a threaded fastener, which slides in a track.

The shelves will be held in place by .12" thick stamped plated brackets and bolts.

The location will be per customer requirements.

MOUNTING TRACKS

There will be seven (7) sets of tracks for mounting shelf(s) in all the body compartments. These tracks will be installed vertically to support the adjustable shelf(s), and will be full height of the compartment. The tracks will be unpainted with a natural finish.

RUB RAIL

Bottom edge of the side body compartments will be trimmed with a bright aluminum extruded rub rail. The rear lower edge of the rear compartments will have an aluminum treadplate rub rail.

Trim extrusion will be 2.12" high with 1.38" flanges turned outward for rigidity.

The rub rails will not be an integral part of the body construction, which allows replacement in the event of damage.

BODY FENDER CROWNS

Stainless steel fender crowns will be provided around the rear wheel openings.

A rubber welting will be installed between the body and the crown to seal the seam and restrict moisture from entering.

A dielectric barrier will be provided between the fender crown fasteners (screws) and the fender sheet metal to prevent corrosion.

HARD SUCTION HOSE

Two (2) lengths of 6.00" clear corrugated PVC hard suction hose, 10' in length, will be provided. The hose will be equipped with a long handle female coupling on one (1) end and a rocker lug male coupling on the other end. Couplings will be hard coated aluminum.

HOSE TROUGHS

Hard suction hose will be carried in troughs, mounted one (1) above the other, inside the hose bed, on the driver side.

Troughs will be constructed of stainless steel.

A strap will be provided to contain the hose at the rear of the hose trough.

HANDRAILS

The handrails will be 1.25" diameter anodized aluminum extrusion, with a ribbed design, to provide a positive gripping surface.

Chrome plated end stanchions will support the handrail. Plastic gaskets will be used between end stanchions and any painted surfaces.

Drain holes will be provided in the bottom of all vertically mounted handrails.

- Four (4) handrails will be provided, two above each side pump panel.
- Two (2) vertical handrails will be provided, one each side of body, on the front bulkhead door frame.
- One (1) vertical handrail, not less than 29.00" long, will be located on each rear beavertail.
- One (1) full width horizontal handrail will be provided below the hose bed at the rear of the apparatus.

AIR BOTTLE STORAGE

A total of four (4) air bottle compartments will be provided, two (2) each side of the body. The air bottle compartment will be in the form of a PVC round tube to accommodate different size air bottles. A Cast Products door with latch will be provided to contain the air bottle.

EXTENSION LADDER

There will be a 24', two (2) section, aluminum, Duo-Safety, Series 900-A extension ladder provided.

ROOF LADDER

There will be a 14' aluminum, Duo-Safety, Series 775-A roof ladder provided.

LADDER STORAGE

The ladders will be stored between the water tank and the passenger's side compartments.

The ladders will extend into the pump compartment just to the rear of the water pump discharges.

The ladder storage area will be enclosed as practical by means of sheet metal to protect the ladders from road dirt. The ladders that extend into the pump house will also be enclosed. A black rubber boot will be provided to enclose the ladders in the gap between the pump house and the body.

Each ladder will be stored vertically in a separate stainless steel storage trough. Each stainless steel trough will be lined with Dura-Surf nylon slides.

A bright aluminum treadplate enclosure will be provided at the rear of the body to properly contain the ladders. This enclosure will extend to the rear of the side body compartments.

The enclosure will also include a vertically hinged smooth aluminum door with a pair of lift and turn latches to access the ladders.

FOLDING LADDER

One (1) 10' aluminum, Series 585-A Duo-Safety folding ladder will be installed in a U-shaped trough inside the ladder storage compartment.

The pike pole is not on the apparatus as manufactured. The fire department will provide and mount the pike pole.

PIKE POLE STORAGE

Aluminum tubing will be used for the storage of two (2) pike poles and will be located in the ladder storage compartment. If the head of a pike pole can come in contact with a painted surface, a stainless steel scuff plate will be provided.

STEPS

A folding step will be provided on the front of each fender compartment. The step will be bright finished, non-skid with a black coating. Each step will incorporate an LED light to illuminate the stepping surface. The step can be used as a hand hold with two openings wide enough for a gloved hand.

REAR STEPS

Aluminum treadplate corner steps and bright finished, non-skid folding steps will be provided at the rear. The folding steps will have a black coating. Each folding step will incorporate an LED light to illuminate the stepping surface. The folding steps can be used as a hand hold with two openings wide enough for a gloved hand. All steps will provide adequate surface for stepping.

PUMP

Pump will be a Waterous CS, 1250 gpm, single (1) stage midship mounted centrifugal type.

Pump will be the class "A" type.

Pump will deliver the percentage of rated discharge at pressures indicated below:

- 100% of rated capacity at 150 psi net pump pressure.
- 70% of rated capacity at 200 psi net pump pressure.
- 50% of rated capacity at 250 psi net pump pressure.

Pump body will be close-grained gray iron, bronze fitted, and horizontally split in two (2) sections for easy removal of the entire impeller shaft assembly (including wear rings).

Pump will be designed for complete servicing from the bottom of the truck, without disturbing the pump setting or apparatus piping.

Pump case halves will be bolted together on a single horizontal face to minimize a chance of leakage and facilitate ease of reassembly. No end flanges will be used.

Discharge manifold of the pump will be cast as an integral part of the pump body assembly and will provide a minimum of three (3) 3.50" openings for flexibility in providing various discharge outlets for maximum efficiency.

The three (3) 3.50" openings will be located as follows: one (1) outlet to the right of the pump, one (1) outlet to the left of the pump, and one (1) outlet directly on top of the discharge manifold.

Impeller shaft will be stainless steel, accurately ground to size. It will be supported at each end by sealed, anti-friction ball bearings for rigid precise support.

Bearings will be protected from water and sediment by suitable stuffing boxes, flinger rings, and oil seals. No special or sleeve type bearings will be used.

Stuffing boxes will be of the conventional two (2) piece, split-gland type, to permit adjustment or replacement of Grafoil packing without disturbing the pump. Water will be fed into stuffing box lantern rings for proper lubrication and cooling when the pump is operating.

Lantern rings will be located at the inner ends of the stuffing boxes, to avoid having to remove them when replacing pump packing.

Wear rings will be bronze and easily replaceable to restore original pump efficiency and eliminate the need to replace the entire pump casing due to wear.

PUMP TRANSMISSION

The pump transmission will be made of a three (3) piece, aluminum, horizontally split casing. Power transfer to pump will be through a high strength Morse HY-VO silent drive chain. By the use of a chain rather than gears, 50% of the sprocket will be accepting or transmitting torque, compared to two (2) or three (3) teeth doing all the work.

Drive shafts will be 2.35" diameter hardened and ground alloy steel and supported by ball bearings. The case will be designed to eliminate the need for water cooling.

AIR PUMP SHIFT

Pump shift engagement will be made by a two (2) position sliding collar, actuated pneumatically (by air pressure), with a three (3) position air control switch located in the cab. A manual back-up shift control will also be located on the driver's side pump panel.

Two (2) indicator lights will be provided adjacent to the pump shift inside the cab. One (1) green light will indicate the pump shift has been completed and be labeled "pump engaged". The second green light will indicate when the pump has been engaged, and that the chassis transmission is in pump gear. This indicator light will be labeled "OK to pump".

Another green indicator light will be installed adjacent to the hand throttle on the pump panel and indicate either the pump is engaged and the road transmission is in pump gear, or the road transmission is in neutral and the pump is not engaged. This indicator light will be labeled "Warning: Do not open throttle unless light is on".

The pump shift control in the cab will be illuminated to meet NFPA requirements.

TRANSMISSION LOCK-UP

The direct gear transmission lock-up for the fire pump operation will engage automatically when the pump shift control, in the cab, is activated.

AUXILIARY COOLING SYSTEM

A supplementary heat exchange cooling system will be provided to allow the use of water from the discharge side of the pump for cooling the engine water. The heat exchanger will be cylindrical type and will be a separate unit. The heat exchanger will be installed in the pump or engine compartment with the control located on the pump operator's control panel. Exchanger will be plumbed to the master drain valve.

INTAKE RELIEF VALVE

An Elkhart relief valve will be installed on the suction side of the pump preset at 125 psig.

Relief valve will have a working range of 75 psig to 250 psig.

Outlet will terminate below the frame rails with a 2.50" National Standard hose thread adapter and will have a "do not cap" warning tag.

Control will be located behind an access door at the right (passenger's) side pump panel.

PRESSURE CONTROLLER

A Fire Research Pump Boss Model PBA200 pressure governor will be provided.

A pressure transducer will be installed in the water discharge manifold on the pump.

The display panel will be located at the pump operator's panel.

PRIMING PUMP

The priming pump will be a Trident Emergency Products compressed air powered, high efficiency, multistage venturi based AirPrime System, conforming to standards outlined in the current edition of NFPA 1901.

All wetted metallic parts of the priming system are to be of brass and stainless steel construction.

One (1) priming control will open the priming valve and start the pump primer.

IMPELLER HUB

The midship pump impeller hubs will be flame plated.

RECIRCULATING LINE, WITH CHECK VALVE

A .50" diameter recirculating line, from the pump to the water tank, will be furnished with a control installed at the pump operator's control panel. A check valve will be provided in this line to prevent the back flow of water from the tank to the pump if the valve is left in the open position.

PUMP MANUALS

Two (2) pump manuals from the pump manufacturer will be furnished in compact disc format with the apparatus. The manuals will cover pump operation, maintenance, and parts.

PLUMBING

All inlet and outlet plumbing, 3.00" and smaller, will be plumbed with either stainless steel pipe or synthetic rubber hose reinforced with high-tensile polyester braid. Small diameter secondary plumbing such as drain lines will be stainless steel, brass or hose.

Where vibration or chassis flexing may damage or loosen piping or where a coupling is required for servicing, the piping will be equipped with victaulic or rubber couplings.

Plumbing manifold bodies will be ductile cast iron or stainless steel.

All lines will drain through a master drain valve or will be equipped with individual drain valves. All individual drain lines for discharges will be extended with a hose to drain below the chassis frame.

All water carrying gauge lines will be of flexible polypropylene tubing.

MAIN PUMP INLETS

A 6.00" pump manifold inlet will be provided on each side of the vehicle. The suction inlets will include removable die cast zinc screens that are designed to provide cathodic protection for the pump, thus reducing corrosion in the pump.

The main pump inlets will have National Standard Threads with a long handle chrome cap.

The cap will be the Pierce V.I.H, which incorporates a Pierce exclusive thread design to automatically relieve stored pressure in the line when disconnected.

VALVES

All ball valves will be Akron Brass. The Akron valves will be the 8000 series heavy-duty style with a stainless steel ball and a simple two-seat design. No lubrication or regular maintenance is required on the valve.

Valves will have a ten (10) year warranty.

INLET (Left side)

On the left side pump panel will be one (1) 2.50" auxiliary suction, terminating in 2.50" National Standard Hose Thread. The auxiliary suction will be provided with a strainer, chrome swivel and plug.

INLET (Right side)

On the right side pump panel will be one (1) 2.50" auxiliary suction, terminating in 2.50" National Standard Hose Thread. The auxiliary suction will be provided with a strainer, chrome swivel and plug.

The location of the valve for the two (2) inlets will be recessed behind the pump panel.

INLET CONTROL

Control for the side auxiliary inlet(s) will be located at the inlet valve.

INLET BLEEDER VALVE

A .75" bleeder valve will be provided for each side gated inlet. The valves will be located behind the panel with a swing style handle control extended to the outside of the panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. The water discharged by the bleeders will be routed below the chassis frame rails.

TANK TO PUMP

The booster tank will be connected to the intake side of the pump with heavy duty piping and a quarter turn 3.00" full flow line valve with the control remotely located at the operator's panel. Tank to pump line will run straight (no elbows) from the pump into the front face of the water tank and angle down into the tank sump. A rubber coupling will be included in this line to prevent damage from vibration or chassis flexing.

A check valve will be provided in the tank to pump supply line to prevent the possibility of "back filling" the water tank.

TANK REFILL

A 2.50" combination tank refill and pump re-circulation line will be provided, using a quarter-turn full flow ball valve controlled from the pump operator's panel.

DISCHARGE OUTLETS (Left Side)

There will be two (2) discharge outlets with a 2.50" valve on the left side of the apparatus, terminating with a male 2.50" National Standard hose thread adapter.

DISCHARGE OUTLETS (Right Side)

There will be one (1) discharge outlet with a 2.50" valve on the right side of the apparatus, terminating with a male 2.50" National Standard hose thread adapter.

There will be one (1) discharge outlet with a 3.00" valve on the right side of the apparatus, terminating with a male 3.00" National Standard hose thread adapter.

The outlet will be controlled by a hand wheel control located at the pump operator's panel. An indicator will be provided to show the position of the valve.

FRONT DISCHARGE OUTLET

There will be one (1) 1.50" discharge outlet piped to the front of the apparatus and located in the center bumper tray.

Plumbing will consist of 2.00" piping and flexible hose with a 2.00" full flow ball valve with control at the pump operator's panel. A fabricated weldment made of stainless steel pipe will be used in the plumbing where appropriate. The piping will terminate with a 1.50" NST with 90 degree stainless steel swivel.

There will be Class I automatic drains provided at all low points of the piping.

DISCHARGE CAPS

Chrome plated, rocker lug, caps with chains will be furnished for all side discharge outlets.

The caps will be the Pierce VLH, which incorporates a Pierce exclusive thread design to automatically relieve stored pressure in the line when disconnected.

OUTLET BLEEDERS

A .75" bleeder valve will be provided for each outlet 1.50" or larger. Automatic drain valves are acceptable with some outlets if deemed appropriate with the application.

The valves will be located behind the panel with a swing style handle control extended to the outside of the side pump panel. The handles will be chrome plated and provide a visual indication of valve position. The swing handle will provide an ergonomic position for operating the valve without twisting the wrist and provides excellent leverage. Bleeders will be located at the bottom of the pump panel. They will be properly labeled identifying the discharge they are plumbed in to. The water discharged by the bleeders will be routed below the chassis frame rails.

ELBOWS, LEFT SIDE OUTLETS

The 2.50" discharge outlets, located on the left side pump panel, will be furnished with a 2.50"(F) National Standard hose thread x 2.50"(M) National Standard hose thread, chrome plated, 45 degree elbow.

The elbow will be the Pierce VLH, which incorporates a Pierce exclusive thread design to automatically relieve stored pressure in the line when disconnected.

ELBOWS, RIGHT SIDE OUTLETS

The 2.50" discharge outlets, located on the right side pump panel, will be furnished with a 2.50"(F) National Standard hose thread x 2.50"(M) National Standard hose thread, chrome plated, 45 degree elbow.

The elbow will be the Pierce VLH, which incorporates a Pierce exclusive thread design to automatically relieve stored pressure in the line when disconnected.

ELBOW, 3.00" OUTLET

The 3.00" outlet will be furnished with a 3.00"(F) National Standard hose thread x 5.00" Storz elbow adapter with Storz cap.

DISCHARGE OUTLET CONTROLS

The discharge outlets will incorporate a quarter-turn ball valve with the control located at the pump operator's panel. The valve operating mechanism will indicate the position of the valve.

If a hand wheel control valve is used, the control will be a minimum of a 3.9" diameter stainless steel hand wheel with a dial position indicator built in to the center of the hand wheel.

DELUGE RISER

A 3.00" deluge riser will be installed above the pump in such a manner that a monitor can be mounted and used effectively. Piping will be rigidly braced and installed securely so no movement develops when the line is charged. The riser will be gated and controlled at the pump operator's panel.

The deluge riser will have male National Pipe Threads for mounting the monitor.

CROSSLAY HOSE BEDS

Two (2) crosslays with 1.50" outlets will be provided. Each bed to be capable of carrying 200 feet of 1.75" double jacketed hose and will be plumbed with 2.00" i.d. pipe and gated with a 2.00" quarter turn ball valve.

Outlets to be equipped with a 1.50" National Standard hose thread 90 degree swivel located in the hose bed so that hose may be removed from either side of apparatus.

The crosslay controls will be at the pump operator's panel.

The center crosslay dividers will be fabricated of .25" aluminum and will provide adjustment from side to side. The divider will be unpainted with a brushed finish.

Vertical scuff plates, constructed of stainless steel, will be provided at the front and rear ends of the bed on each side of vehicle.

Crosslay bed flooring will consist of removable perforated brushed aluminum.

CROSSLAY HOSE BEDS, 2.50"

One (1) crosslay with 2.50" outlets will be provided. This bed to be capable of carrying 200 feet of 2.50" double jacketed hose and will be plumbed with 2.50" i.d. pipe and gated with a 2.50" quarter turn ball valve.

Outlet to be equipped with a 2.50" National Standard hose thread 90 degree swivel located in the hose bed so that hose may be removed from either side of apparatus.

The crosslay control will be at the pump operator's panel.

The center crosslay dividers will be fabricated of .25" aluminum and will provide adjustment from side to side. The divider will be unpainted with a brushed finish. The remainder of the crosslay bed will be painted job color.

Stainless steel vertical scuff plates will be provided at hose bed ends (each side of vehicle). Bottom of hose bed ends (each side) will also be equipped with a stainless steel scuff plate.

Crosslay bed flooring will consist of removable perforated brushed aluminum.

CROSSLAY/DEADLAY HOSE RESTRAINT

A black 1.00" nylon webbing design with 2.00" box pattern will be provided across each end of one (1) crosslay/deadlay(s) to secure the hose during travel. The webbing will be permanently attached at the top of the crosslay/deadlay opening(s). 1.00" web straps will loop through footman loops located at the opposite end of the permanently attached webbing. The straps will attach with a pair of 1.00" cam buckle fasteners.

CROSSLAY/DEADLAY HOSE RESTRAINT

An aluminum treadplate cover, hinged at the front will be installed over the top of the crosslay/deadlay(s). It will include a latch at each end of the cover to hold it securely in place, a chrome grab handle at each end for opening and closing the cover and a foam rubber gasket where the cover comes into contact to a painted surface. The cover will be provided with no stay arm device hold open device.

BACKBOARD STORAGE

A transverse area over the pump and rearward of the crosslays will hold two (2) storage troughs.

A blister will be supplied at each side to enclose the backboards due to their length.

The backboards will be accessible from either side of the vehicle through the aluminum treadplate door(s).

The size of the backboard(s) to be stored will be 72" x 2" x 18".

PUMP COMPARTMENT

The pump compartment will be separate from the hose body and compartments so that each may flex independently of the other. It will be a fabricated assembly of steel tubing, angles and channels which supports both the fire pump and the side running boards.

The pump compartment will be mounted on the chassis frame rails with rubber biscuits in a four point pattern to allow for chassis frame twist.

Pump compartment, pump, plumbing and gauge panels will be removable from the chassis in a single assembly.

PUMP MOUNTING

Pump will be mounted to a substructure which will be mounted to the chassis frame rail using rubber isolators. The mounting will allow chassis frame rails to flex independently without damage to the fire pump.

PUMP CONTROL PANELS (Left Side Control)

All pump controls and gauges will be located at the left (driver's) side of the apparatus and properly identified.

Layout of the pump control panel will be ergonomically efficient and systematically organized.

The pump operator's control panel will be removable in two (2) main sections for ease of maintenance:

The upper section will contain sub panels for the mounting of the pump pressure control device, engine monitoring gauges, electrical switches, and foam controls (if applicable). Sub panels will be removable from the face of the pump panel for ease of maintenance. Below the sub panels will be located all valve controls and line pressure gauges.

The lower section of the panel will contain all inlets, outlets, and drains.

All push/pull valve controls will have 1/4 turn locking control rods with polished chrome plated zinc tee handles. Guides for the push/pull control rods will be chrome plated zinc castings securely mounted to the pump panel. Push/pull valve controls will be capable of locking in any position. The control rods will pull straight out of the panel and will be equipped with universal joints to eliminate binding.

IDENTIFICATION TAGS

The identification tag for each valve control will be recessed in the face of the tee handle.

All discharge outlets will have color coded identification tags, with each discharge having its own unique color. Color coding will include the labeling of the outlet and the drain for each corresponding discharge.

All line pressure gauges will be mounted directly above the corresponding discharge control tee handles and recessed within the same chrome plated casting as the rod guide for quick identification. The gauge and rod guide casting will be removable from the face of the pump panel for ease of maintenance. The casting will be color coded to correspond with the discharge identification tag.

All remaining identification tags will be mounted on the pump panel in chrome plated bezels.

The pump panel on the right (passenger's) side will be removable with lift and turn type fasteners.

Trim rings will be installed around all inlets and outlets.

The trim rings for the side discharge outlets will be color coded and labeled to correspond with the discharge identification tag.

PUMP PANEL CONFIGURATION

The pump panel configuration will be arranged and installed in an organized manner that will provide user-friendly operation.

PUMP AND GAUGE PANEL

The pump and gauge panels will be constructed of black vinyl covered aluminum, to allow easy identification of the gauges and controls and to eliminate glare.

The black vinyl will be bonded to the aluminum by the company that supplies our metal.

A polished aluminum trim molding will be provided around each panel.

The passenger's side pump panel will be removable and fastened with swell type fasteners.

AIR HORN BUTTON

An air horn control button will be provided at the pump operator's control panel. This button will be properly labeled and put within easy reach of the operator.

GAUGES, VACUUM and PRESSURE

The pump vacuum and pressure gauges will be liquid filled and manufactured by Class 1, Inc.

The gauges will be a minimum of 4.50" in diameter and will have white faces with black lettering, with a pressure range of 30.00"-0-600#.

The pump pressure and vacuum gauges will be installed adjacent to each other at the pump operator's control panel.

Test port connections will be provided at the pump operator's panel. One will be connected to the intake side of the pump, and the other to the discharge manifold of the pump. They will have 0.25 in. standard pipe thread connections and polished stainless steel plugs. They will be marked with a label.

PRESSURE GAUGES

The individual "line" pressure gauges for the discharges will be Class 1 interlube filled.

They will be 2.50" in diameter and have white faces with black lettering.

Gauges will have a pressure range of 0-400#.

The individual pressure gauge will be installed as close to the outlet control as practical.

WATER LEVEL GAUGE

A Fire Research, Model WLA2000 series electric water level gauge will be provided on the operator's panel, that registers water level by means of 9 LEDs. They will be at 1/8 level increments with a tank empty LED. The LEDs will be a bright type that is readable in sunlight, and have a full 180 degree of clear viewing.

To further alert the pump operator, will have a warning flash when the tank volume is less than 25%, and will have "Down Chasing LEDs" when the tank is almost empty.

The level measurement will be ascertained by sensing the head pressure of the fluid in the tank or cell.

WATER LEVEL GAUGE, CAB SIDES

There will be two (2) additional water level indicator, Whelen, Model: PSTANK, LED module, installed one each side on the apparatus body.

This light module will include four (4) colored levels, and function similar to the water level indicator located at the operators panel:

- First green module indicates a full water level.
- Second blue module indicates a water level above 3/4 full.
- Third amber module indicates a water level above 1/2 full.
- Last red module indicates a water level above 1/4 full and empty.
 - Above 1/4 this light will be steady burning.
 - At empty this light will be flashing.

This module will be activated when the parking brake is set.

LIGHT SHIELD

There will be a polished, 16 gauge stainless steel light shield installed over the pump operators panel.

- There will be 12 volt DC white LED lights installed under the stainless steel light shield to illuminate the controls, switches, essential instructions, gauges, and instruments necessary for the operation of the apparatus. These lights will be activated by the pump panel light switch. Additional lights will be included every 18.00" depending on the size of the pump house.
- One (1) pump panel light will come on when the pump is in ok to pump mode.

There will be a light activated above the pump panel light switch when the parking brake is set. This is to afford the operator some illumination when first approaching the control panel.

There will be a green pump engaged indicator light activated on at the operator's panel when the pump is shifted into gear from inside the cab.

ELECTRICAL

All 12-volt electrical equipment installed by the apparatus manufacturer will conform to modern automotive practices. All wiring will be high temperature crosslink type. Wiring will be run in loom or conduit where exposed and have grommets where wire passes through sheet metal. Automatic reset circuit breakers will be provided which conform to SAE Standards. Wiring will be color, function and number coded. Function and number codes will be continuously imprinted on all wiring harness conductors at 2.00" intervals. Exterior exposed wire connectors will be positive locking, and environmentally sealed to withstand elements such as temperature extremes, moisture and automotive fluids. Electrical wiring and equipment will be installed utilizing the following guidelines:

(1) All holes made in the roof will be caulked with silicon. Large fender washers, liberally caulked, will be used when fastening equipment to the underside of the cab roof.

(2) Any electrical component that is installed in an exposed area will be mounted in a manner that will not allow moisture to accumulate in it. Exposed area is defined as any location outside of the cab or body.

(3) Electrical components designed to be removed for maintenance will not be fastened with nuts and bolts. Metal screws will be used in mounting these devices. Also a coil of wire will be provided behind the appliance to allow them to be pulled away from mounting area for inspection and service work.

(4) Corrosion preventative compound will be applied to all terminal plugs located outside of the cab or body. All non-waterproof connections will require this compound in the plug to prevent corrosion and for easy separation (of the plug).

(5) All lights that have their sockets in a weather exposed area will have corrosion preventative compound added to the socket terminal area.

(6) All electrical terminals in exposed areas will have silicon (1890) applied completely over the metal portion of the terminal. All emergency light switches will be mounted on a separate panel installed in the cab. A master warning light switch and individual switches will be provided to allow pre-selection of emergency lights. The light switches will be "rocker" type with an internal indicator light to show when switch is energized. All switches will be properly identified and mounted in a removable panel for ease in servicing.

Identification of the switches will be done by either printing or etching on the switch panel. The switches and identification will be illuminated.

All lights and reflectors, required to comply with Federal Motor Vehicle Safety Standard #108, will be furnished. Rear identification lights will be recessed mounted for protection. Lights and wiring mounted in the rear bulkheads will be protected from damage by installing a false bulkhead inside the rear compartments.

An operational test will be conducted to ensure that any equipment that is permanently attached to the electrical system is properly connected and in working order.

The results of the tests will be recorded and provided to the purchaser at time of delivery.

STEP LIGHTS

Four (4) white LED, step lights will be provided. One (1) step light will be provided on each side, on the front compartment face and two (2) step lights at the rear to illuminate the tailboard.

In order to ensure exceptional illumination, each light will provide a minimum of 25 foot-candles (fc) covering an entire 15" x 15" square placed ten (10) inches below the light and a minimum of 1.5 fc covering an entire 30" x 30" square at the same ten (10) inch distance below the light.

These step lights will be actuated with the pump panel light switch.

All other steps on the apparatus will be illuminated per the current edition of NFPA 1901.

REAR FMVSS LIGHTING

There will be the following stop/tail and directional lighting provided at the rear of the truck:

- Two (2) Whelen, Model 60BTT*, red LED stop/tail lights with color lenses.
- Two (2) Whelen, Model 60A00TAR, amber LED directional lights.

The lights will be mounted with a Whelen, Model 6ELANGE, chrome flange.

There will be four (4) red reflectors provided.

Two (2) Whelen, Model: 60J000CR, backup lights, with flange, will be provided.

Both lights will be installed with 6E or 64 flange kit.

REAR ID/MARKER DOT LIGHTING

There will be one (1) Truck-Lite Model 15050R three (3) LED light kit used as identification lights located at the rear of the apparatus per the following:

- As close as practical to the vertical centerline.
- Centers spaced not less than 6.00" or more than 12.00" apart.

- Red in color.
- All at the same height.

There will be two (2) LED lights installed at the rear of the apparatus used as clearance lights located at the rear of the apparatus per the following:

- To indicate the overall width of the vehicle.
- One (1) each side of the vertical centerline.
- As near the top as practical.
- Red in color.
- To be visible from the rear.

There will be two (2) LED lights installed on the side of the apparatus as close to the rear as practical per the following:

- To indicate the overall length of the vehicle.
- One (1) each side of the vertical centerline.
- As near the top as practical.
- Red in color.
- To be visible from the side.

Per FMVSS 108 and CMVSS 108 requirements.

LICENSE PLATE BRACKET

There will be one (1) license plate bracket mounted on the driver's side above the warning lights.

A white LED light will illuminate the license plate. A polished stainless steel light shield will be provided over the light that will direct illumination downward, preventing white light to the rear.

MAP LIGHT

One (1) map light with goose neck and toggle switch control will be provided. The map light will be a Federal Little, Model LF18TS, and be located on the center map console. Each map light will be provided with an 18.00" long flexible neck that exits the top of the chassis mount.

Each light will be provided with a red filter that easily slides over the clear lamp for night vision.

"DO NOT MOVE APPARATUS" INDICATOR

A Whelen Model SSR00FRR flashing red LED indicator light, located in the driving compartment, will be illuminated automatically per the current NFPA requirements. The light will be labeled "Do Not Move Apparatus If Light Is On".

The same circuit that activates the Do Not Move Apparatus indicator will activate a pulsing alarm when the parking brake is released.

OPEN DOOR INDICATOR LIGHT

A red "open door" indicator light will be provided inside the cab, in clear view of the driver, to warn of an open compartment door.

COMPARTMENT LIGHTING

6.00" diameter Truck-Lite, model 79384, light/s will be provided in each enclosed compartment. Each light will have a number 1076 one filament, two wire bulb.

A switch for activating the light will be provided on the light lens.

PUMP COMPARTMENT LIGHT

A pump compartment light will be provided inside the right side pump enclosure and accessible through a door on the pump panel.

A .125" weep hole will be provided in each light lens, preventing moisture retention.

PERIMETER SCENE LIGHTS, CAB

There will be a Truck-Lite, model 40003, 4.00" grommet mount weatherproof light provided for each cab door. Lighting will be designed to provide illumination on areas under the driver, officer, and crew cab riding area exits, which will be activated automatically when the exit doors are opened and by the same means as the body perimeter lights.

The lighting will be capable of providing illumination at a minimum level of two (2) foot-candles on ground areas within 30.00" of the edge of the apparatus in areas which personnel climb in or out of the apparatus or descend from the apparatus to the ground level.

BODY PERIMETER SCENE LIGHTS

There will be four (4) Truck-lite, Model 40227C, 4.00" white incandescent lights with Model 40700 grommets provided.

The lights will be mounted in the following locations:

- One (1) light will be provided under the driver's side pump panel running board.
- One (1) light will be provided under the driver's side rear step area shining to the rear.
- One (1) light will be provided under the passenger's side rear step area shining to the rear.
- One (1) light will be provided under the passenger's side pump panel running board.

The perimeter scene lights will be activated when the parking brake is applied.

SCENE LIGHTS

One (1) pair of Whelen, Model 60*000*U, halogen scene lights will be installed one each side as high as possible on the rear body.

These lights will have 13 degree internal optics.

The lights will be controlled by a switch at the driver side switch panel.

These lights will be installed with a flange.

12 VOLT LIGHTING

There will be two (2) Fire Research Evolution, Model FCA530-V15, 12 volt DC LED scene lights provided on push up, side mount poles, located one each side at the pump compartment.

The lights will be controlled by a switch at the pump operator's panel.

These lights may be load managed when the parking brake is applied.

These lights will not be connected to the Do Not Move Truck Indicator circuit.

CAB SPOTLIGHT

There will be one (1) Golight/RadioRay®, Model 20**, white halogen spotlight located on the cab roof, in front of the light bar. The spotlight will be mounted on a painted Z bracket.

This light may be load managed when the parking brake is applied.

SPOTLIGHT CONTROLLER

There will be one (1) wired dash mounted remote provided for the spotlight.

SPOTLIGHT CONTROLLER LOCATION

The remote to control each spotlight will be located within reach of the driver.

DECK LIGHTS

Two (2) 6.00" Unity AG deck lights with swivel mount will be provided at the rear of the hose bed, one (1) each side.

One (1) light will be furnished with a 160,000 candle power halogen spot bulb and the other will be furnished with a 6,000 candle power halogen flood bulb.

AIR HORN SYSTEM

Two (2) Grover Stuttertone air horns will be provided and located in the front bumper, recessed each side of the front hose tray. The horn system will be piped to the air brake system wet tank utilizing .38" tubing. A pressure protection valve will be installed in-line to prevent loss of air in the air brake system.

AIR HORN CONTROL

The air horns will be actuated by a push button located on officer side instrument panel and by the horn button in the steering wheel. The driver will have the option to control the air horns or the chassis horns from the horn button by means of a selector switch located on the instrument panel.

EMERGENCY SWITCH PANEL

An emergency switch panel will be provided in the cab. The switch panel will be located overhead and on the cab instrument panel.

ELECTRONIC SIREN

A Whelen, Model: 295SLSA1, electronic siren with noise canceling microphone will be provided.

This siren to be active when the battery switch is on and that emergency master switch is on.

Siren head will be located in the center console.

The electronic siren will be controlled on the siren head only. No horn button or foot switches will be provided.

SPEAKER

There will be one (1) speaker provided. Each speaker will be a Whelen model SA315P black nylon composite, 100-watt, with through bumper mounting brackets. Each speaker will be connected to the siren amplifier.

The speaker(s) will be recessed in the front bumper on the driver's side.

ELECTRONIC SIREN, (Aux)

There will be a Federal, Model EQ2B-200, electronic siren with noise canceling microphone provided.

AUXILIARY ELECTRIC SIREN LOCATION

The auxiliary electric siren will be located on the center console so that it is accessible to both the driver and officer.

AUXILIARY SIREN CONTROL

The auxiliary electronic siren will be controlled from a foot switch located on the driver's side.

AUXILIARY SIREN CONTROL

The auxiliary electronic siren will be controlled from a push button located within reach of the passenger.

AUXILIARY SIREN SPEAKER

There will be a Federal Signal Model BP200-EF 200 watt recess mount speaker furnished.

AUXILIARY SPEAKER LOCATION

The auxiliary electric siren speaker will be installed in the face of the front bumper on the right side in the outside position.

LIGHTBAR

There will be one (1) 72.00" Whelen Freedom, Model FN**QLED, LED lightbar mounted on the cab roof.

The lightbar will include the following:

- Two (2) red flashing LED modules facing forward.
- Two (2) white flashing LED modules facing forward.
- Two (2) red flashing corner LED modules, one in each front corner.
- One (1) red flashing LED module facing the driver's side.
- One (1) red flashing LED module facing the passenger's side.
- One (1) GTT, Model 795 LED Opticom™, traffic light controller with national standard high priority.

The color of the lenses will be clear.

There will be two (2) switches located on a cab switch panel to control this lightbar.

- One (1) switch will control all the warning lights.
- One (1) switch will control the traffic light controller.

The white warning lights and the traffic light controller will be disabled when the parking brake is applied.

SIDE ZONE LOWER LIGHTING

Six (6) Whelen model 60*021F*R flashing "Super" LED lights will be located at the following positions:

Two (2) lights, one (1) each side on the bumper extension - red Super LED/red lens each side.

Two (2) lights, in the pump panel area/crew cab step area each side - red Super LED/red lens each side.

Two (2) lights, in the body fender panel each side - red Super LED/red lens each side.

The lights will be controlled by a lighted switch on the cab instrument panel.

These lights will be installed with three (3) pairs of flange kits.

REAR ZONE LOWER LIGHTING

Two (2) Whelen model 60*021F*R flashing "Super" LED warning lights will be located at the rear of the apparatus, required to meet or exceed the lower level optical warning and optical power requirements of NFPA.

The color of these lights will be red Super LED/red lens.

One (1) switch in the cab on the switch panel will control these lights.

These lights will be installed with a flange.

REAR/SIDE ZONE UPPER WARNING LIGHTS

There will be two (2) Whelen, Model L31H*F*N, LED warning beacons provided at the rear of the truck, located one (1) each side. These lights will be activated by a lighted switch on the instrument panel.

The color of the lights will be red LEDs with both domes red.

The rear warning lights will be mounted on top of the compartmentation with all wiring totally enclosed. The rear deck lights will be mounted on the beavertails high as possible.

COMMERCIAL CHASSIS PAINT

The chassis will be painted by the chassis manufacturer. It will remain the color and commercial quality finish as provided. The primary color will be Pierce #90 candy apple red.

PAINT

The exterior custom body painting finishing process as follows:

Manual Surface Preparation - All exposed metal surfaces on the custom body will be thoroughly cleaned and prepared for painting. Surfaces that will not be painted include all chrome plated, stainless steel, anodized aluminum and bright aluminum treadplate. Each imperfection on the exterior metal surface will be removed or filled and then sanded smooth for a smooth appearance. All seams will be sealed before painting.

Chemical Cleaning and Treatment - The metal surfaces will be properly cleaned using an acid etching system. Surfaces are chemically cleaned to remove all dirt, oil, grease and metal oxides to ensure the subsequent coatings bond well. An ultra-pure water final rinse will be applied to all metal surfaces, excluding undercarriage components, at the conclusion of the metal treatment process.

Sealer Primer Coat - A two (2) component sealer primer coat will be applied.

Topcoat Paint - Urethane base coat will be applied to opacity for correct color matching.

Clearcoat - Two (2) coats of an automotive grade two (2) component urethane will be applied. Lap style doors will be clear coated to match the body. Roll-up doors will not be clear coated and the standard roll-up door warranty will apply.

All removable items such as brackets, compartment doors, door hinges, trim, etc. will be removed and painted separately to insure paint behind all mounted items. Body assemblies that cannot be finish painted after assembly will be finish painted before assembly.

The chassis will be painted by the chassis manufacturer, and will remain the commercial grade finish as provided. To ensure a good color match between the body and chassis, the apparatus manufacturer and chassis manufacturer will have a mutually preapproved paint color program. The apparatus will be painted Pierce #90 candy apple red.

Prior to reassembly and reinstallation of lights, handrails, door hardware and any miscellaneous body items, an isolation tape or gasket material must be used to prevent damage to the finish painted surfaces. A nylon washer will be installed under each acorn nut or metal screw that is fastened directly to a painted body surface.

PAINT - ENVIRONMENTAL IMPACT

Contractor will meet or exceed all current State (his) regulations concerning paint operations. Pollution control will include measures to protect the atmosphere, water and soil. Controls will include the following conditions:

- Topcoats and primers must be chrome and lead free.
- Metal treatment chemicals must be chrome free. The wastewater generated in the metal treatment process must be treated to remove any other heavy metals.
- Particulate emissions from painting operations must be collected by a dry filter or water wash process.
- Solvents used in clean-up operations must be collected, sent off-site for distillation and returned for reuse.

Additionally, the finished apparatus will not be manufactured with or contain products that have ozone depleting substances. Contractor will, upon demand, present evidence that his manufacturing facility meets the above conditions and that it is in compliance with his State EPA rules and regulations.

PAINT CHASSIS FRAME ASSEMBLY

The chassis frame assembly shall be painted black by the chassis manufacturer. It shall remain the commercial grade finish as provided.

COMPARTMENT INTERIOR PAINT

The compartment interior will be painted with a gray spatter finish for ease of cleaning and to make it easier to touch up scratches and nicks.

REFLECTIVE STRIPES

Three (3) reflective stripes will be provided across the front of the vehicle and along the sides of the body. The reflective band will consist of a 1.00" blue stripe at the top with a 1.00" gap then a 6.00" white stripe with a 1.00" gap and a 1.00" blue stripe on the bottom.

The reflective band provided on the cab face will be at the headlight level.

"Z" JOG IN REFLECTIVE STRIPE

There will be one (1) "Z"-shaped jog/s provided in the reflective stripe design.

CHEVRON STRIPING, REAR

There will be alternating chevron striping located on the rear-facing vertical surface of the apparatus. The rear surface, excluding the rear compartment door, will be covered.

The colors will be red and fluorescent yellow green diamond grade.

Each stripe will be 6.00" in width.

This will meet the requirements of NFPA 1901, 2009 edition, which states that 50% of the rear surface will be covered with chevron striping.

CAB DOORS REFLECTIVE STRIPE

A white reflective stripe will be provided on the interior of each cab door.

This stripe will be a minimum of 96.00 square inches and will meet the NFPA 1901 requirement.

LETTERING

There will be reflective lettering, 18.00" high, with outline provided. There will be nine (9) letters provided.

EMBLEM/S

There will be two (2) pair of reflective emblems, installed on the over wheel compartments on the body and also on the forward cab doors. Emblems will be modeled after the department submitted information (art, patch, etc.).

NEPA 2009 STANDARDS

This apparatus specification includes a commercial chassis that has not been certified to meet the requirements of NFPA 1901 by the chassis manufacturer. Although this chassis may comply with certain aspects of the standard, Pierce has not received certification from this chassis manufacturer that all criteria have been met. The body as built by the manufacturer must comply with the NFPA standards effective January of 2009.

Certification of slip resistance of all stepping, standing and walking surfaces must be supplied with delivery of the apparatus.

A plate that is highly visible to the driver while seated will be provided. This plate will show the overall height, length, and gross vehicle weight rating.

The manufacturer will have programs in place for training, proficiency testing and performance for any staff involved with certifications.

An official of the company will designate, in writing, who is qualified to witness and certify test results.

NEPA COMPLIANCY

Apparatus proposed by the bidder will meet the applicable requirements of the National Fire Protection Association (NFPA) as stated in the current edition at time of contract execution. Fire Department's specifications that differ from NFPA specifications will be indicated in the proposal as "non-NFPA."

CD MANUAL, BODY PARTS ONLY

A custom parts manual for the Pierce® installed parts only will be provided in CD format with the completed unit.

The manual will contain the following:

- Job number
- Part numbers with full descriptions
- Table of contents
- Parts section sorted in functional groups reflecting a major system, component, or assembly
- Parts section sorted in Alphabetical order
- Instructions on how to locate parts

The manual will be specifically written for the body model being purchased. It will not be a generic manual for a multitude of different bodies.

SERVICE PARTS INTERNET SITE

The service parts information included in this manual are also available on the Pierce website. The website offers additional functions and features not contained in this manual, such as digital photographs and line drawings of select items. The website also features electronic search tools to assist in locating parts quickly.

MANUALS, SERVICE

A CD format service manual supplement containing parts and service information on Pierce® installed components will be provided with the completed unit.

The manual will be specifically written for the unit being purchased. It will not be a generic manual for a multitude of different units.

MANUAL, CHASSIS OPERATION

One (1) chassis operation manual will be provided with the completed unit.

TWO (2) YEAR MATERIAL AND WORKMANSHIP

Each new piece of apparatus will be provided with a minimum two (2) year basic apparatus material and workmanship limited warranty. The warranty will cover such portions of the apparatus built by the

manufacturer as being free from defects in material and workmanship that would arise under normal use and service.

A copy of the warranty certificate will be submitted with the bid package (No Exception).

CHASSIS WARRANTY

The chassis manufacturer will provide a **three (3) year or 100,000 mile warranty**.

PAINT WARRANTY

The commercial chassis manufacturer's paint warranty will apply to the paint on the chassis only.

TRANSMISSION WARRANTY

The transmission will have a **five (5) year/unlimited mileage** warranty covering 100 percent parts and labor. The warranty to be provided by Allison Transmission and not apparatus builder.

LIFETIME MATERIAL AND WORKMANSHIP

A UPF poly water tank limited warranty certificate, WA0195, is included with this proposal.

TEN (10) YEAR STRUCTURAL INTEGRITY

The Pierce apparatus body limited warranty certificate, WA0009, is included with this proposal.

ROLL UP DOOR MATERIAL AND WORKMANSHIP WARRANTY

A Gortite roll-up door limited warranty will be provided. The mechanical components of the roll-up door will be warranted against defects in material and workmanship for the lifetime of the vehicle. A six (6) year limited warranty will be provided on painted and satin roll up doors.

The limited warranty certificate, WA0190, is included with this proposal.

PUMP WARRANTY

A Waterous pump limited warranty certificate, WA0225, is included with this proposal.

TEN (10) YEAR PUMP PLUMBING WARRANTY

The Pierce apparatus plumbing limited warranty certificate, WA0035, is included with this proposal.

TEN (10) YEAR PRO-RATED PAINT AND CORROSION

A Pierce body limited pro-rated paint warranty certificate, WA0057, is included with this proposal.

VEHICLE STABILITY CERTIFICATION

The fire apparatus manufacturer will provide a certification stating the apparatus complies with NFPA 1901, current edition, section 4.13, Vehicle Stability. The certification will be provided at the time of bid.

CAB INTEGRITY

The cab has been tested to and passed the following standards:

- ECE Regulation No.29
- SAE J2422 Cab Roof Strength Evaluation - Quasi-Static Loading Heavy Trucks.



Fire and Rescue Apparatus

Two (2) Year Bumper to Bumper

Pierce Body - Class H

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	This limited warranty covers repairs to correct any defect related to materials or workmanship occurring during the warranty period.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Two (2) Years, or 20,000 Miles, or 3,000 Engine Hours
Conditions and Exclusions:	<p>This limited warranty does not apply to aspects of the product that are covered by other Pierce or Supplier warranties. See the applicable specific warranty for details of coverage and exclusions. Such warranties may include, but not be limited to, paint, corrosion, frame, structure, electronics, pumps, piping, and Goldstar laminates. Where conflicts exist, the coverage and exclusions of the specific warranty shall apply. If the specific warranty is a pro-rated warranty, the terms at the end of the pro-rated period will apply for the remaining years of the bumper to bumper coverage.</p> <p>This warranty does not cover normal wear to any parts or components including but not limited to: filters, lubricants, and light bulbs.</p>

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERE TO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Structural Integrity

Apparatus Body

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	The apparatus body shall be free from structural failures caused by defects in material and workmanship
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years - or - 100,000 Miles
Conditions and Exclusions:	This warranty applies only to the body tubular support and mounting structures and other structural components of the body of the vehicle model, as identified in the Pierce specifications for the Fire and Rescue Apparatus.
See Also Paragraphs 2 thru 4	This warranty does not apply to damage caused by corrosion.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department, or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

One (1) Year Material and Workmanship

Graphics Fading and Deterioration

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer.

Coverage:	Each graphic lamination shall be free from defects in material workmanship, fading, and deterioration.
Warranty Begins:	The date the apparatus is placed in service, or 60 days from the original buyer invoice date, whichever comes first.
Warranty Period Ends After:	One (1) Year
Conditions and Exclusions:	This warranty does not cover damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual).
See Also Paragraphs 2 thru 4	

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators, with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured, or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department, or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Pro-Rated Paint and Corrosion

Custom Body

Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer.

Coverage:	Exterior surfaces of the body shall be free from blistering, peeling, corrosion or any other adhesion defect caused by defective manufacturing methods or paint material selection.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years
Conditions and Exclusions:	<p>This limited warranty is applicable to the vehicle in the following percentage costs of warranty repair, if any:</p> <p>Topcoat Durability & Appearance: Gloss, Color Retention & Cracking 0-72 months 100% 73-96 months 50% 97-120 months 25%</p> <p>Integrity of Coating System: Adhesion, Blistering/Bubbling 0-36 months 100% 37-84 months 50% 85-120 months 25%</p> <p>Corrosion: Dissimilar Metal and Crevice 0-36 months 100% 37-48 months 50% 49-72 months 25% 73-120 months 10%</p> <p>Corrosion Perforation 0-120 months 100%</p> <p>This limited warranty applies only to exterior paint. Paint on the vehicle's interior is warranted only under the Pierce Basic One Year Limited Warranty.</p> <p>Items not covered by this warranty include:</p> <p>(a) Damage from lack of maintenance and cleaning (proper cleaning and maintenance procedures are detailed in the Pierce operation and maintenance manual).</p> <p>(b) UV paint fade.</p> <p>(c) Any cab not manufactured by Pierce.</p>
See Also Paragraphs 2 thru 4	

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators; with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof.

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured; or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department; or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



Fire and Rescue Apparatus

Ten (10) Year Material and Workmanship Stainless Steel Piping Limited Warranty

1. LIMITED WARRANTY

Subject to the limitations and exclusions set forth below, Pierce Manufacturing provides the following warranty to the Buyer:

Coverage:	Stainless steel piping shall be free from structural failures caused by defects in material and workmanship, or perforation caused by corrosion.
Warranty Begins:	The date of the original purchase invoice (issued when the product ships from the factory).
Warranty Period Ends After:	Ten (10) Years or 100,000 Miles
Conditions and Exclusions:	Pierce's obligation under this warranty is limited to repairing or replacing without charge, as Pierce may elect, the stainless steel piping or components which Pierce determines to have failed due to defective material and workmanship, or perforation caused by corrosion.
See Also Paragraphs 2 thru 4	This warranty does not cover the use of fluoroprotein (FP) type foam. The sodium chloride within FP foam can cause long-term damage to system components if not thoroughly flushed immediately after use.

This limited warranty shall apply only if the product is properly maintained in accordance with Pierce's maintenance instructions and manuals and is used in service which is normal to the particular model. Normal service means service which does not subject the product to stresses or impacts greater than normally result from careful use. If the Buyer discovers a defect or nonconformity, it must notify Pierce in writing within thirty (30) days after the date of discovery, but in any event prior to the expiration of the warranty period. THIS LIMITED WARRANTY MAY NOT BE ASSIGNED OR OTHERWISE TRANSFERRED BY THE BUYER TO ANY SUBSEQUENT USER OR PURCHASER OR TO ANY OTHER PERSON OR ENTITY.

Notwithstanding anything to the contrary herein, Pierce makes no warranty whatsoever as to:

(a) any integral parts, components, attachments or trade accessories of or to the product that are not manufactured by Pierce, including but not limited to engines, transmissions, drivelines, axles, water pumps and generators, with respect to all such parts, components, attachments and accessories, Pierce shall assign to Buyer the applicable warranties, if any, made by the respective manufacturers thereof;

(b) any vehicle, chassis, or component, part, attachment or accessory damaged by misuse, neglect, fire, exposure to severe environmental or chemical conditions, acidic environment, improper maintenance, accident, crash, or force majeure such as natural disaster, lightning, earthquake, windstorm, hail, flood, war or riot;

(c) any vehicle, chassis or component, part, attachment or accessory that has been repaired, altered or assembled in any way by any person or entity other than Pierce which, in the sole judgment of Pierce, adversely affects the performance, stability or purpose for which it was manufactured, or

(d) products or parts which may in the ordinary course wear out and have to be replaced during the warranty period, including, but not limited to, tires, fluids, gaskets and light bulbs. Pierce assumes no responsibility for the assembly of its parts or subassemblies into finishing products or vehicles unless the assembly is performed by Pierce.

The original purchaser may void this warranty in part or in its entirety if the product is repaired or replaced (a) without prior written approval of the Pierce Customer Service Department, or (b) at a facility which has not been approved by Pierce as to technical capability. Any repairs, modifications, alterations or aftermarket parts added after manufacture without the authorization of Pierce may void this warranty.

2. DISCLAIMERS OF WARRANTIES

THE WARRANTY SET FORTH IN PARAGRAPH 1 IS THE SOLE AND EXCLUSIVE WARRANTY GIVEN BY PIERCE. PIERCE HEREBY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES, WHETHER EXPRESS, IMPLIED OR STATUTORY, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY, ANY WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE, AND ANY WARRANTIES ARISING FROM COURSE OF DEALING OR USAGE OF TRADE.

3. BUYER'S EXCLUSIVE REMEDY

If the product fails to conform to the warranty set forth in paragraph 1 during the warranty period, and such nonconformity is not due to misuse, neglect, accident or improper maintenance, Buyer must notify Pierce within the time period specified in paragraph 1, and shall make the product available for inspection by Pierce or its designated agent. At the request of Pierce, any allegedly defective product shall be returned to Pierce by Buyer for examination and/or repair. Buyer shall be responsible for the cost of such transportation, and for risk of loss of or damage to the product during transportation. Within a reasonable time, Pierce shall repair or replace (at Pierce's option and expense) any nonconforming or defective parts. Repair or replacement shall be made only by a facility approved in advance in writing by Pierce. THIS REMEDY SHALL BE THE EXCLUSIVE AND SOLE REMEDY FOR ANY BREACH OF WARRANTY.

4. EXCLUSION OF CONSEQUENTIAL AND INCIDENTAL DAMAGES

Notwithstanding anything to the contrary herein or in any agreement between Pierce and Buyer, IN NO EVENT SHALL PIERCE BE LIABLE FOR ANY CONSEQUENTIAL, INCIDENTAL, SPECIAL, INDIRECT, OR PUNITIVE DAMAGES WHATSOEVER, WHETHER ARISING OUT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE AND STRICT LIABILITY) OR OTHER THEORY OF LAW OR EQUITY, WITH RESPECT TO VEHICLES OR OTHER PRODUCTS SOLD BY PIERCE, OR THEIR OPERATION OR FAILURE TO OPERATE, OR ANY DEFECTS THEREIN, OR ANY UNDERTAKINGS, ACTS OR OMISSIONS RELATED THERETO, REGARDLESS OF WHETHER PIERCE HAS BEEN INFORMED OF THE POSSIBILITY OF ANY SUCH DAMAGES. Without limiting the generality of the foregoing, Pierce specifically disclaims any liability for property or personal injury damages, penalties, damages for lost profits or revenues, loss of vehicles or products or any associated equipment, cost of substitute vehicles or products, down-time, delay damages, any other types of economic loss, or for any claims by any third party for any such damages.

Note: Any Surety Bond, if a part of the sale of the vehicle as to which this limited warranty is provided, applies only to this Pierce Basic One Year Limited Warranty for such vehicle, and not to other warranties made by Pierce in a separate document (if any) or to the warranties (if any) made by any manufacturer (other than Pierce) of any part, component, attachment or accessory that is incorporated into or attached to the vehicle.



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Gail:

Freightliner M2106, M2112, 108SD and 114SD base spec chassis GVW ordered through 9/30/2013 by Pierce Manufacturing and delivered to Pierce Manufacturing by 12/31/2013 carry an extended 3Yr/100,000 mile basic vehicle warranty. This warranty is limited to chassis domiciled within the United States.

Please let me know if you require any additional information.

Regards,

John Frawley
Director of Corporate Accounts

Freightliner (FTL)

***Run Smart™***

Freightliner Medium-Duty/Business Class

Coverage		
Description	Time ¹	Distance ¹
Basic Vehicle	2 Years	Unlimited
Battery	1 Year	100,000 mi/161 000 km
Brightwork	6 Months	Unlimited
Cab Corrosion/Perforation	5 Years	Unlimited
Cab Structure	2 Years	Unlimited
Chassis Paint	6 Months	Unlimited
Corrosion	6 Months	Unlimited
Crossmembers	5 Years	Unlimited
Drivetrain	2 Years	Unlimited
Frame Rails	5 Years	Unlimited
Paint	1 Year	100,000 mi/161 000 km
Steer Axle ²	2 Years	Unlimited

¹Time or distance, whichever comes first²Steer axle coverage-group applies to glider only.

Warranty Statement & Warranty Coverage Descriptions follow on page two of this document.

The information provided in this document is for general information only and is not offered as customer's warranty.

This coverage may be superseded without notification.

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Effective: 8/1/2018

Warranty Statement

1.00 NEW VEHICLE COVERAGE

The following section outlines Company standard warranty coverages for all Company vehicles, apparatuses or rigs sold and domiciled in the USA (50 states and Washington, D.C.), Puerto Rico, and Canada. This section is also included in the Operator's Maintenance and Owner's Warranty Information Booklet.

1.01 NEW VEHICLE LIMITED WARRANTY

Under this New Vehicle Limited Warranty ("Warranty"), Company warrants that each new vehicle will be free from defects in material and workmanship that occur under normal use within the applicable warranty period, subject to certain limitations and exclusions as specified in this document.

This Warranty covers all components and parts unless specifically covered by other warranties or otherwise excluded by this document.

1.02 LIMITATIONS

This Warranty does not apply to vehicles that are sold or domiciled outside of the United States (50 states and Washington, D.C.), Puerto Rico, or Canada.

This Warranty does not apply to engines, Allison or Twin Disc transmissions, tires, or other components or parts that are not manufactured by Company and that are warranted directly by their respective manufacturers. With respect to the foregoing, Company makes no warranty whether express, implied, statutory or otherwise including, but not limited to, any warranty of merchantability or fitness for a particular purpose.

THIS WARRANTY IS EXCLUSIVE AND IN LIEU OF ALL OTHER WARRANTIES OF ANY KIND WHETHER WRITTEN, ORAL, OR IMPLIED INCLUDING, BUT NOT LIMITED TO ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THIS WARRANTY SPECIFICALLY EXCLUDES ANY OTHER WARRANTIES OR CONDITIONS PROVIDED FOR BY LAW, WHETHER STATUTORY OR OTHERWISE.

COMPANY'S SOLE OBLIGATION UNDER THIS WARRANTY SHALL BE TO REPAIR OR REPLACE, IN COMPANY'S SOLE DISCRETION, ANY DEFECTIVE COMPONENT OR PART. SUCH REPAIR OR REPLACEMENT SHALL BE WITHOUT COST TO PURCHASER WHEN PERFORMED WITHIN THE APPLICABLE WARRANTY PERIOD (TIME, DISTANCE, OR HOUR LIMIT, WHICHEVER OCCURS FIRST).

Purchaser must notify Company within the applicable warranty period, of any failure of the vehicle to comply with this Warranty and Purchaser must, at Purchaser's expense, promptly return the vehicle to an authorized Dealer for inspection and repair or replacement of any defect in material or workmanship occurring within the applicable warranty period.

The vehicle must be maintained and serviced according to the prescribed schedules outlined in the Driver's/Operator's and Maintenance Manuals. Receipted bills and other evidence that required maintenance and service have been performed are required by Company as a condition of this Warranty.

After the Company's obligations under this Warranty expire, all liabilities of Company to Purchaser under this Warranty shall terminate. Repairs made under this Warranty do not constitute an extension of the original Warranty period for the vehicle or for any specific component or part.

In the event that any provision of this Warranty contravenes the law of any jurisdiction, such provision shall be inapplicable in such jurisdiction, and the remainder of the warranty shall not be affected.

1.03 PURCHASER'S EXCLUSIVE REMEDY

THIS WARRANTY SHALL BE THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AGAINST COMPANY, WHETHER IN CONTRACT, UNDER STATUTE (INCLUDING STATUTORY PROVISIONS AS TO CONDITIONS AS TO QUALITY OR FITNESS FOR ANY PARTICULAR PURPOSE OF GOODS SUPPLIED PURSUANT TO THE CONTRACT OF SALE), WARRANTY, TORT, STRICT LIABILITY, OR ANY OTHER LEGAL THEORY.

1.04 LIMITATION OF LIABILITY

COMPANY'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE COST TO REPAIR OR REPLACE, IN COMPANY'S SOLE DISCRETION, THE DEFECTIVE COMPONENT OR PART THAT IN NO EVENT SHALL EXCEED THE FAIR MARKET VALUE OF THE VEHICLE AT THE TIME THE DEFECT IS DISCOVERED.

IN NO EVENT SHALL COMPANY BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL, OR CONSEQUENTIAL DAMAGES INCLUDING, BUT NOT LIMITED TO, INJURIES TO PERSONS OR DAMAGE TO PROPERTY, LOSS OF PROFITS OR ANTICIPATED PROFITS, OR LOSS OF VEHICLE USE.

Coverage Descriptions

Axles

Coverage includes all factory installed steer axles; drive axles; tag axles; and pusher axles. *Excludes any axle installed by a dealer or body builder.*

Drive Axle(s)

Coverage includes axle housing, carrier assembly, differential assembly, power divider, axle shafts, and gaskets and seals. *Excludes suspension and torque rod brackets, tie rod ends, wheel end equipment, wiring, yokes, and attaching hardware.*

Pusher Axle

A pusher axle is a non driven, weight bearing axle that can be raised when not required to bear a portion of the load. Since the pusher axle can be of many different configurations, warranty coverage includes all components included in the individual build specification of each individual application.

Steer Axle

Coverage includes I-beam, steering knuckles, differential on drive steer axle, spindles, kingpins, kingpin bearings and steering arms. *Excludes wheel end equipment, tie rod ends, steering linkage components, kingpin bushings, and king pin seals.*

Tag Axle

Tag axle is a non driven, continuous, weight bearing axle. Since the tag axle can be of many different configurations, warranty coverage includes all components included in the individual build specification of each individual application.

Battery

Only Freightliner LLC's private brand label (Alliance Brand Parts), Mopar (Steering Bullet only), and Duracell (ISL360 Model only) batteries will be warranted. *Any other brand of battery is excluded from Company coverage. Claims for all other brands must be submitted directly to the supplier. Warranty coverage includes the battery assembly only.*

Basic Body

Coverage includes body emergency lighting and controls; hinged and rollup compartment doors; body trim; body lighting and controls; body electrical systems.

Basic Chassis

Coverage includes all factory installed components of the vehicle/chassis that are not excluded elsewhere in the warranty, or by special agreement or described as having a different time or distance or hours, or listed separately on each new vehicle warranty coverage chart.

Basic Vehicle

Coverage includes all factory installed components of the vehicle/chassis that are not excluded elsewhere in the warranty, or by special agreement or described as having a different time or distance, or listed separately on each new vehicle warranty coverage chart.

Body Electrical

Coverage includes body wiring harness(es) only.

Body Structure

Coverage includes compartments and body panels; hinged compartment doors; tie pump closure; body frame and sub frame, if applicable. *Excludes surface corrosion caused by chips or scratches.*

Body Structure and Corrosion

Coverage includes compartments and body panels; hinged compartment doors; tie pump closure; body frame and sub frame, if applicable. *Excludes surface corrosion caused by chips or scratches.*

Brightwork

Coverage includes all factory installed components with chrome, polished aluminum, or polished stainless steel surfaces. *Excludes any damage to bumper, backside of bumpers, and concealed or inner surfaces.*

Cab Corrosion/Perforation

Coverage is limited to rust through or perforation of the cab and integral sleeper structure and sleeper box (if applicable) due to corrosion from within. *Excludes all conditions of rust or corrosion that has not resulted in rust-through or perforation as well as surface rust or corrosion caused by non-adhesion. Excludes any damage to the paint such as chips or scratches.*

Cab Structure

Coverage includes cab and integral sleeper structural components, structural components of factory installed sleeper boxes (if applicable), sheet metal panels, doors, and hoods. *Excludes all bolt-on components including door and hood hinges, latches, guides, and other mounting hardware.*

Corrosion

Coverage provides warranty against corrosion to any metal or metal alloy part of the vehicle. Rust or corrosion to specific components and/or caused by certain conditions are excluded from all Company warranty coverage and will not be paid under Basic Vehicle, Cab Structure, Cab Corrosion, or Aftermarket Parts Warranty.

Exclusions to corrosion warranty include, but are not limited to, the following:

- Corrosion caused by general rust (for example, rust on the unfinished backside of a bumper)
- Rust caused by chips or scratches in the paint or chrome surfaces
- Corrosion caused by high pressure washing, severe wash solutions, cleaning solvents, detergents, compounds
- Corrosion caused by salinity in the environment or corrosive salts and/or chemicals used on the road surface.
- Corrosion caused by acid rain or other industrial fallout
- Corrosion due to improper prevention measures during storage or use

- Corrosion or rust on bumpers, rotors or drums (rotor exclusion does not apply to hydraulic discs with Magna Coil Rotors)
- Corrosion due to environmental damage (including ocean spray); airborne fallout (includes chemicals, tree sap, etc.); or other atmospheric conditions or other acts of nature
- Corrosion due to improper use, misuse or abuse, negligence, including improper or insufficient maintenance

Cowl Corrosion/Perforation

Coverage is limited to rust-through or perforation of the cowl due to corrosion from within. *Excludes all conditions of rust or corrosion that have not resulted in rust through or perforation as well as surface rust or corrosion caused by non-adhesion. Excludes any damage to the paint such as chips or scratches.*

Cowl Structure

Coverage includes cowl structural components, sheet metal panels, and hood. *Excludes all bolt-on components including hood hinges, latches, guides, or other mounting hardware.*

Crossmembers

Coverage includes crossmembers, gussets, and truck-mounting bolts that attach gussets to crossmembers and gussets/crossmembers to frame rails. *Excludes any bolt-on item attached with either conventional or truck bolts.*

Driveline

Coverage includes driveshaft tubing, U-joints, yokes, support bearings, and spines.

Driveshaft

Coverage includes transmission, [except Allison transmissions] steer axle(s), drive axle(s), and transfer case. *Excludes tag axle(s), pusher axle(s), driveline, and U-joints.*

Frame Rails

Coverage is limited to breaking or cracking of factory installed frame rails, frame rail liners, frame rail extensions, and any item(s) factory welded to them. *Excludes all bolt on items regardless if attached with conventional or truck bolts.*

Glider

An incomplete vehicle which may be ordered with or without engine and/or major drive train components; warranty coverage includes all components as specified in the specific build specification.

Off Road On-Site Assistance

Coverage is exclusively available on off road vehicles that are prohibited from use on public streets. If this coverage is provided, it will be specifically included in the coverage table as a separate category. Coverage includes on-site assistance and/or equipment transportation to the nearest authorized repairing location for a Daimler Trucks North America LLC warrantable repair.

Paint (Body, Cab, & Cowl)

Paint coverage includes lack of gloss issues on vehicles painted with low gloss colors, the underside of hoods and roof and side mounted air faunings; and any damages to the paint or painted surfaces such as chips and scratches.

Body Paint

Coverage includes all factory-painted exterior body surfaces. Warranted against orange peel; peeling/delaminating; cracking or checking or loss of gloss due to cracking, checking or having.

Cab Paint

Coverage includes all factory-painted exterior surfaces (except those included in chassis paint coverage). Warranted against orange peel; peeling or delaminating; cracking or checking; or loss of gloss due to cracking, checking or having.

Cowl Paint

Coverage includes all factory-painted exterior surfaces of cowl structure (except those included in chassis paint). Warranted against orange peel; peeling or delaminating; cracking or checking or loss of gloss due to cracking, checking or having.

Paint, Chassis (Chassis Paint)

Coverage includes all factory painted surfaces on frame rails, crossmembers/gussets, front and rear bumpers, suspension components, power train components, drivelines, fuel tanks, air tanks, wheel end equipment, tool boxes, battery boxes, access steps, and attaching brackets and hardware. Warranted against peeling or non adhesion. *Excludes U-joints and any damages to the paint or painted surface such as chips and scratches.*

Towing/Roadside Assistance

Coverage includes roadside assistance or towing (to the nearest authorized repair location) for a Daimler Trucks North America LLC warrantable repair in a vehicle down situation that prevents the safe and lawful operation of the vehicle. If this coverage is provided, it will be specifically included in the coverage table as a separate category.

Transfer Case Assembly

Coverage includes housing and all internally lubricated parts.

Transmission

Coverage includes housing and all internally lubricated parts, electric/air shift/control units, valves, gaskets, and seals. *Excludes broken synchronizer pins, PITs, transfer case(s), airlines, gauge senders, yoke(s), clutch and clutch control components including clutch brake. Excludes Allison automatic transmissions and Twin Disc Automatic Transmissions.*

Wheel End Equipment

Coverage includes brake components, wheels, hubs, drums, rotors, wheel seals/ bearings, slack adjusters, and attaching hardware.

EXCLUSIONS

The following components, parts, or conditions, are specifically excluded from coverage under this Warranty.

AIR COMPRESSORS, ENGINE BRAKES, AND OTHER PROPRIETARY ENGINE COMPONENTS

The engine manufacturer installs most air compressors and engine brakes. Any failure of a proprietary engine component or Jacob[®] Brake component must be filed directly to the engine manufacturer. Failures on non-proprietary components can be filed through Daimler Trucks North America LLC Dealers.

AIR SPRINGS

Tolerance buildup can occur during the assembly process of the rear suspension and rear cab air springs, and can cause the springs to have the appearance of being crooked, misaligned or improperly installed. This tolerance buildup is not detrimental to the operation of the vehicle and will not have an effect on either the quality of the ride or the durability of the components or vehicle. Straightening of these springs is not covered under this Warranty.

ALIGNMENT OF AXLES/WHEELS/STEERING WHEEL

Each Daimler Trucks North America vehicle manufacturing plant uses an integrated alignment system to align axles and wheels and to center the steering wheel to Daimler Trucks North America LLC specifications. Realignment or readjustment of these items is not covered under warranty.

Any special alignment settings at the request of the Owner must be handled between the Dealer and Owner after delivery from factory. These special adjustments are not covered under Warranty.

AXLE BREATHING VENTS

During the vehicle manufacturing process, an oil run or drip stain may appear at the breather vent. Removing the vent, applying pipe sealant to the threaded vent fitting and re-installing the vent is unnecessary. Removing the axle breather vent and re-sealing the threaded fitting is not covered under this Warranty.

CAB INTERIOR COMPONENTS

The repair or replacement of cab interior components that are rendered unserviceable due to normal wear or abuse are not covered under this warranty.

These components include, but are not limited to:

- ✓ Upholstery
- ✓ Floor coverings (including floor mats)
- ✓ Curtains
- ✓ Window shades
- ✓ Steering wheel
- ✓ Steering wheel wrap
- ✓ Painted trim components

CHROME SURFACES, ALUMINUM AND STAINLESS STEEL COMPONENTS

The following items ARE covered under this Warranty:

- ✓ Chrome peeling off in sheets
- ✓ Chrome cut at mounting bolts due to over-torque at the factory
- ✓ Bubbles in the chrome that are not caused by rock chips and/or general rust conditions
- ✓ Isolated rust along seams or welds

The following items are NOT covered under this Warranty:

- ✓ General rust, for example, rust on the unfinished backside of a bumper
- ✓ Dimpling at the mounting bolts
- ✓ Staining, bluing, and/or yellowing that can be cleaned with a quality cleaning-product
- ✓ Rust, pits, and/or nicks caused by road wash or road debris breaking the chrome surface
- ✓ Streaks/stains/corrosion caused by severe wash solutions or corrosive road salts/chemicals

Claims pertaining to failures of chrome surfaces, aluminum, and stainless steel components will not be processed unless a clear digital picture is provided that adequately shows the defect.

CLUTCH ADJUSTMENT

Clutch adjustments are normally required due to clutch wear and are considered normal maintenance. However, if the clutch adjustment is found to be outside of Company specifications during, or prior to, in-service of the vehicle, a warranty claim will be accepted on a one-time basis.

Claims for clutch adjustments will not be accepted unless the adjustment is found to be outside of Company specifications using the special clutch adjustment measuring tools provided by Company (e.g., adjusting the clutch to satisfy feel will not be accepted as warranty).

COMPETITION

Warranty will become void on any vehicle that is used in competition, including but not limited to:

- ✓ Racing
- ✓ Tractor pulls
- ✓ Other motor sports

CONSUMABLE PARTS

Parts that are subject to consumption during their normal service life and are routinely replaced during normal maintenance services are covered up to 15,000 miles (24,000km) for all Daimler Trucks North America LLC vehicles except Thomas Built Bus (TBB) bodies and chassis. TBB consumable parts are covered up to 30 days from the date of in-service.

These items are:

- | | | |
|------------------------------|---------------------------------|---|
| ✓ Antennas | ✓ Fire extinguishers | ✓ Caps (radiator, surge, fuel tank) |
| ✓ Ashtrays | ✓ Fluorescent ballast and tubes | ✓ Receiver-dryer filter |
| ✓ Belts | ✓ Fuses | ✓ Trailer air hoses |
| ✓ Brake linings | ✓ Gladhand | ✓ Trailer electrical cables |
| ✓ Cigarette lighter assembly | ✓ Hoses/tunnies | ✓ Windshield washer nozzles |
| ✓ Clutch brake | ✓ Light bulbs | ✓ Wiper arms and blades (TBB makes - wiper blades only) |
| ✓ Clutch linings | ✓ Mattresses | |
| ✓ Data logger | ✓ Mud flaps | |
| ✓ batteries | ✓ Mud flap mounting brackets | |
| ✓ Desiccant cartridges | | |

Consumable parts NOT covered under this Warranty include, but are not limited to, the following:

- ✓ Antifreeze
- ✓ Filters (fuel, air, oil, water)
- ✓ Fluids (unless low due to a warrantable failure)
- ✓ Lubricants

CORROSION

Coverage provides warranty against corrosion to any metal or metal alloy part of the vehicle. Rust or corrosion to specific components and/or caused by certain conditions are excluded from all Company warranty coverage and will not be paid under Basic Vehicle, Cab Structure, Cab Corrosion, or Aftermarket Parts Warranty.

Exclusions to corrosion warranty include, but are not limited to, the following:

- ✓ Corrosion caused by general rust (for example, rust on the unfinished backside of a bumper)
- ✓ Surface rust caused by chips or scratches in the paint or chrome surfaces
- ✓ Corrosion caused by high-pressure washing, severe wash solutions, cleaning solvents, detergents, compounds
- ✓ Corrosion caused by salinity in the environment or corrosive salts and/or chemicals used on the road surface.
- ✓ Corrosion caused by acid rain or other industrial fallout
- ✓ Corrosion due to improper prevention measures during storage or use
- ✓ Corrosion or rust on tone rings, rotors or drums (rotor exclusion does not apply to hydraulic discs with Magna-Coat Rotors)
- ✓ Corrosion due to environmental damage (including ocean spray); airborne fallout (includes chemicals, tree sap, etc.), or other atmospheric conditions or other acts of nature
- ✓ Corrosion due to improper use, misuse or abuse, negligence, including improper or insufficient maintenance

DAMAGE

The following are not covered under this Warranty:

- ✓ Damage caused by use of the vehicle in any application that is not approved or is inconsistent with build specifications
- ✓ Damage resulting from improper use or misuse or abuse, negligence, improper operation, improper or insufficient maintenance (including, but not limited to failure to maintain vehicle as outlined in the driver's/operator's and maintenance manuals), overloading, unauthorized modifications, accidents, or operation at excessive speeds
- ✓ Environmental damage, including airborne fallout (including chemicals, tree sap, etc.), or other atmospheric conditions, hailstones, or other acts of nature
- ✓ Damage caused by road salts/chemicals or cleaning solvents, detergents or compounds
- ✓ Storage deterioration including damage caused by improper or insufficient storage or maintenance
- ✓ Damage caused by road hazards or road conditions
- ✓ Damage caused during shipping/transport after initial delivery of vehicle
- ✓ Damages (including peeling or flaking) caused by high-pressure washing or steam-cleaning
- ✓ Damages occurring after in-service (e.g., from rock chips)
- ✓ Damages caused by customer-installed scalar in air conditioning systems
- ✓ Damages caused by engine horsepower/torque upgrades
- ✓ Damage due to vibration associated with misapplication or improper operation of drivetrain components
- ✓ Damage due to terrorist activities
- ✓ Damage due to acts of war

ENGINE

The engine, including all of its components as supplied by the manufacturer, is not covered under this Warranty, but is warranted separately by the manufacturer of the engine. For engine warranty or service, contact the engine manufacturer's authorized sales and service facility.

EXHAUST SYSTEM CLAMPS

During the early life of the vehicle or when the engine is cold, many exhaust clamps exhibit a soot trace. This condition is self-correcting and does not require adjustment, tightening, or replacement of the clamp. Claims for adjusting or tightening will not be paid under warranty.

FIFTH WHEELS

Adjustment of the locking mechanism, bushings, slide locking plungers, and the repair or replacement of lock guards are considered routine maintenance and are not covered under this Warranty.

GLASS, MIRRORS, LENS

Glass, mirror or lens breakage or chips or scratches of glass, mirrors, or lenses are not covered by this Warranty.

MISAPPLICATION OF VEHICLE

The warranty on any vehicle used inconsistent with its specified vocation/application will be downgraded to the warranty that is consistent with the vehicle use. Any and all claims associated with the misapplication of the vehicle will be subject to chargeback.

MISCELLANEOUS EXPENSES

Premium charges and work not directly related to the repair or replacement of a warranted part are not covered under this Warranty. Examples include, but are not limited to:

- Federal, state, provincial, and local taxes
- Travel expenses
- Loss of revenue
- Customer labor including overtime labor
- Downtime
- Driver's expenses
- Cost of rental equipment
- Loss of cargo, including perishable cargo
- General housekeeping supplies (i.e. rags, solvents, sweeping compounds, coveralls, etc.)
- Communication charges
- Towing/road call assistance (unless coverage is specifically stated in the applicable warranty table)
- Repair or replacement of optional items not sold or installed by company
- Removal or replacement of dealer, body builder, or customer installed equipment
- Environmental fees, cleanup, or other charges
- Cost of emergency services.

MODIFICATIONS TO ORIGINAL EQUIPMENT

Company does not warrant vehicle component or chassis modifications, or equipment installations arranged by Dealers or Customers. In addition, the extra time necessary to remove body builder installed items and/or equipment to work on a warranted repair is not covered under this Warranty unless Company sells the complete chassis/body/equipment as a package.

If Dealers or Customers perform any vehicle modifications or equipment installations, to the extent these modifications or equipment installations adversely affect other vehicle components or vehicle performance, Company shall not accept any product liability or claims under the terms of the vehicle warranty. These claims become the sole responsibility of the person performing the modifications or equipment installations.

PAINT

The following exclusions to paint warranty include, but are not limited to:

- Complete chassis re-painting to repair paint damages
- Damages occurring after in-service (e.g., from rock chips)
- Peeling/flaking caused by high-pressure washing or steam cleaning
- Rusting of painted bumpers
- Removal and/or replacement of decals, striping, and/or lettering not applied by Company

Specific areas of the vehicle are deliberately not painted or are not painted to any standard; paint repairs are not warrantable to such areas. These areas include:

- Underside of the hood, including the inside of the wheel wells
- Underside of the exterior sun visor
- Inside of the side-mounted air fairings
- Inside of the bumper
- Underside of the roof-mounted air fairings
- Aftertreatment devices

Gloss: Gloss Warranty claims pertaining to gloss issues on vehicles painted with low-gloss colors (as identified in the Data Books) are the Dealer's responsibility and will not be honored by warranty.

TRANSMISSIONS

Allison transmissions and components are covered under this Warranty, but are warranted separately by Allison. Information regarding Allison's warranty is provided for informational purposes only and is subject to change. For warranty or service information, contact Allison's authorized sales and service facility.

ROUTINE MAINTENANCE

Routine maintenance, servicing, and adjustment, as defined in the applicable Vehicle Maintenance Manual and Owner's Manual, are excluded from Warranty.

Periodic adjustment or re-torque of wheel bearings, wheel lug nuts, and suspension U-bolts are considered maintenance adjustments and are not covered under warranty.

Vibrations, squeaks, rattles, loose fittings/clamps, hose fitting leaks, loose nuts/bolts/screws, and loose electrical connections may develop during the initial trip(s) of the vehicle and these types of repairs/adjustments are covered under warranty one time during the following applicable initial operating periods unless excluded in the paragraphs below.

Reminder: After the following initial operating periods, these developments are the result of use and their repair/adjustment activities are considered routine maintenance and thus excluded from warranty.

INITIAL OPERATING PERIOD

The Initial Operating Period (IOP) for Daimler Trucks North America LLC vehicles (except TBB makes) is up to 15,000mi (24,000km), except for FCCC where it is 25,000mi (40,200km). The IOP for Thomas Built Bus (TBB) bodies and chassis is 30 days from the date of in-service. See CONSUMABLE PARTS.

Exclusions from warranty during the Initial Operating Period are:

- Cab, hood, and fender-mounted mirrors are adjusted at the factory but may be retracted by the transporter to prevent damage during transport. Subsequent adjustments and tightening of mirror mounting hardware are considered part of the routine preparation of the vehicle before Customer delivery. Claims for adjusting the mirrors or tightening of the attaching hardware will not be paid under warranty during the initial operating period or after.
- Claims for re-routing of electrical wiring, hoses, or lines which meet Daimler Trucks North America's routing standards will not be paid under warranty during the initial operating period or after.
- Final preparation of the vehicle for Customer delivery to include cleaning/vacuuming interior of cab, washing windows, washing the exterior of the vehicle, polishing exterior chromed or painted surfaces are considered as delivering-Dealer responsibilities. Claims for these activities will not be paid under warranty during the initial operating periods or after.

TEST VEHICLES

Any vehicles being used in testing or used to test specific components must be identified to the Warranty Department and accommodations must be made for claims that relate to the test item(s).

Any vehicles used in endurance testing, such as the Altoona Test, are void of all warranty, new or used.

TIRES AND TIRE BALANCING

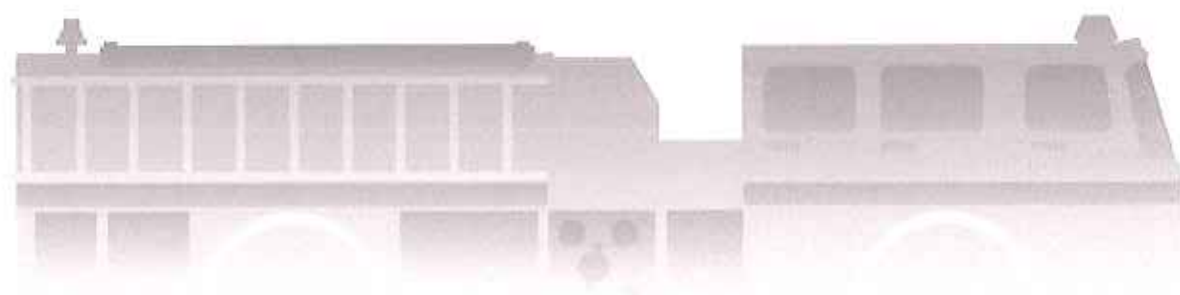
The tires are not covered under this Warranty, but are warranted separately by the tire manufacturer. Tire balancing is not covered under warranty.



Cummins Warranty

Worldwide

Fire Apparatus/Crash Trucks



Coverage

Products Warranted

This Warranty applies to new diesel Engines sold by Cummins and delivered to the first user on or after April 1, 2007, that are used in fire apparatus truck and crash truck* applications Worldwide.

Base Engine Warranty

The Base Engine Warranty covers any failures of the Engine which result, under normal use and service, from a defect in material or factory workmanship (Warrantable Failure). This Coverage begins with the sale of the Engine by Cummins and ends five years or 100,000 miles (160,935 kilometers), whichever occurs first, after the date of delivery of the Engine to the first user.

Engine aftertreatment components included in the Cummins Critical Parts List (CPL) and marked with a Cummins part number are covered under Base Engine Warranty.

Additional Coverage is outlined in the Emission Warranty section.

These Warranties are made to all Owners in the chain of distribution and Coverage continues to all subsequent Owners until the end of the periods of Coverage.

Cummins Responsibilities

Cummins will pay for all parts and labor needed to repair the damage to the Engine resulting from a Warrantable Failure.

Cummins will pay for the lubricating oil, antifreeze, filter elements, belts, hoses and other maintenance items that are not reusable due to the Warrantable Failure.

Cummins will pay for reasonable labor costs for Engine removal and reinstallation when necessary to repair a Warrantable Failure.

Cummins will pay reasonable costs for towing a vehicle disabled by a Warrantable Failure to the nearest authorized repair location. In lieu of the towing expense, Cummins will pay reasonable costs for mechanics to travel to and from the location of the vehicle, including meals, mileage and lodging when the repair is performed at the site of the failure.

Owner Responsibilities

Owner is responsible for the operation and maintenance of the Engine as specified in Cummins Operation and Maintenance Manuals. Owner is also responsible for providing proof that all recommended maintenance has been performed.

Before the expiration of the applicable Warranty, Owner must notify a Cummins distributor, authorized dealer or other repair location approved by Cummins of any Warrantable Failure and make the Engine available for repair by such facility. Except for Engines disabled by a Warrantable Failure, Owner must also deliver the Engine to the repair facility.

Service locations are listed on the Cummins Worldwide Service Locator at cummins.com.

Owner is responsible for the cost of lubricating oil, antifreeze, filter elements and other maintenance items provided during Warranty repairs unless such items are not reusable due to the Warrantable Failure.

Owner is responsible for communication expenses, meals, lodging and similar costs incurred as a result of a Warrantable Failure.

Owner is responsible for non-Engine repairs and for "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs and other losses resulting from a Warrantable Failure.

Owner is responsible for a \$100 (U.S. Dollars) deductible per each service visit under this plan in the 3rd, 4th and 5th years of Base Engine Warranty. The deductible will not be charged during the first 2 years of the Base Engine Warranty.

Limitations

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the aftertreatment could negatively effect emissions certification and void Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel

exhaust fluid.

This Warranty does not apply to accessories supplied by Cummins which bear the name of another company. Such non-warranted accessories include, but are not limited to: alternators, starters, fans, air conditioning compressors, clutches, filters, transmissions, torque converters, vacuum pumps, power steering pumps, fan drives and air compressors. Cummins branded alternators and starters are covered for the first two years from the date of delivery of the Engine to the first user, or the expiration of the Base Engine Warranty, whichever occurs first.

Failures resulting in excessive oil consumption are not covered beyond the duration of the Coverage or 100,000 miles (160,935 kilometers) or 7,000 hours from the date of delivery of the Engine to the first user, whichever of the three occurs first. Before a claim for excessive oil consumption will be considered, Owner must submit adequate documentation to show that consumption exceeds Cummins published standards.

Failures of belts and hoses supplied by Cummins are not covered beyond the first year from the date of delivery of the Engine to the first user or the duration of the Warranty, whichever occurs first.

Parts used to repair a Warrantable Failure may be new Cummins parts, Cummins approved rebuilt parts or repaired parts. Cummins is not responsible for failures resulting from the use of parts not approved by Cummins.

A new Cummins or Cummins approved rebuilt part used to repair a Warrantable Failure assumes the identity of the part it replaced and is entitled to the remaining Coverage hereunder.

Cummins Inc. reserves the right to interrogate Electronic Control Module (ECM) data for purposes of failure analysis.

CUMMINS DOES NOT COVER WEAR OR WEAROUT OF COVERED PARTS.

CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

THIS WARRANTY AND THE EMISSION WARRANTY SET FORTH HEREINAFTER ARE THE SOLE WARRANTIES MADE BY CUMMINS IN REGARD TO THESE ENGINES. CUMMINS MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, OR OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Emission Warranty

Products Warranted

This Emission Warranty applies to new Engines marketed by Cummins that are used in the United States** in vehicles designed for transporting persons or property on a street or highway. This Warranty applies to Engines delivered to the first user on or after September 1, 1992.

Coverage

Cummins warrants to the first user and each subsequent purchaser that the Engine is designed, built and equipped so as to conform at the time of sale by Cummins with all U.S. federal emission regulations applicable at the time of manufacture and that it is free from defects in material or factory workmanship which would cause it not to meet these regulations within the longer of the following periods: (A) Five years or 100,000 miles (160,935 kilometers) of operation, whichever occurs first, as measured from the date of delivery of the Engine to the first user or (B) The Base Engine Warranty.

If the vehicle in which the Engine is installed is registered in the state of California, a separate California Emission Warranty also applies.

Limitations

Failures, other than those resulting from defects in material or factory workmanship, are not covered by this Warranty.

Cummins is not responsible for failures or damage resulting from what Cummins determines to be abuse or neglect, including, but not limited to: operation without adequate coolants or lubricants; overfueling; overspeeding; lack of maintenance of lubricating, cooling or intake systems; improper storage, starting, warm-up, run-in or shutdown practices; unauthorized modifications of the Engine.

Any unauthorized modifications to the aftertreatment could negatively effect emissions certification and void Warranty.

Cummins is also not responsible for failures caused by incorrect oil, fuel or diesel exhaust fluid or by water, dirt or other contaminants in the fuel, oil or diesel exhaust fluid.

Cummins is not responsible for non-Engine repairs, "downtime" expenses, cargo damage, fines, all applicable taxes, all business costs or other losses resulting from a Warrantable Failure.

**CUMMINS IS NOT RESPONSIBLE FOR INCIDENTAL
OR CONSEQUENTIAL DAMAGES.**

* Airport operated crash trucks and fire department
operated trucks employed to respond to fires,
hazardous material releases, rescue and other
emergency-type situations.

** United States includes American Samoa, the
Commonwealth of Northern Mariana Islands, Guam,
Puerto Rico and the U.S. Virgin Islands.



Cummins Inc.
Box 3005
Columbus, IN 47202-3005
U.S.A.

Bulletin 3381161
Printed in U.S.A. Rev. 09/00
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NEW PRODUCT WARRANTY



**PARTICIPATING OEM SALES
DISTRIBUTOR SALES**

LIMITED WARRANTY ON NEW ALLISON AUTOMATIC TRANSMISSIONS USED IN EMERGENCY VEHICLE APPLICATIONS

Allison Transmission will provide for repairs or replacement, at its option, during the warranty period of each new Allison transmission listed below that is installed in an Emergency Vehicle in accordance with the following terms, conditions, and limitations.

WHAT IS COVERED

- **WARRANTY APPLIES** — This warranty is for new Allison transmission models listed below installed in an Emergency Vehicle and is provided to the original and any subsequent owner(s) of the vehicle during the warranty period.
- **REPAIRS COVERED** — The warranty covers repairs or replacement, at Allison Transmission's option, to correct any transmission malfunction resulting from defects in material or workmanship occurring during the warranty period. Needed repairs or replacements will be performed using the method Allison Transmission determines most appropriate under the circumstances.
- **TOWING** — Towing is covered to the nearest Allison Transmission Distributor or authorized Dealer only when necessary to prevent further damage to your transmission.
- **PAYMENT TERMS** — Warranty repairs, including parts and labor, will be covered per the schedule shown in the chart contained in section "APPLICABLE MODELS, WARRANTY LIMITATIONS, AND ADJUSTMENT SCHEDULE."
- **OBTAINING REPAIRS** — To obtain warranty repairs, take the vehicle to any Allison Transmission Distributor or authorized Dealer within a reasonable amount of time and request the needed repairs. A reasonable amount of time must be allowed for the Distributor or Dealer to perform necessary repairs.
- **TRANSMISSION REMOVAL AND REINSTALLATION** — Labor costs for the removal and re-installation of the transmission, when necessary to make a warranty repair, are covered by this warranty.
- **WARRANTY PERIOD** — The warranty period for all coverages shall begin on the date the transmission is delivered to the first retail purchaser, with the following exception:

Demonstration Service - A transmission in a new truck or bus may be demonstrated to a total of 5000 miles (8000 kilometers). If the vehicle is within this limit when sold to a retail purchaser, the warranty start date is the date of purchase. Normal warranty services are applicable to the demonstrating Dealer. Should the truck or bus be sold to a retail purchaser after these limits are reached, the warranty period will begin on the date the vehicle was first placed in demonstration service and the purchaser will be entitled to the remaining warranty.

APPLICABLE MODELS, WARRANTY LIMITATIONS, AND ADJUSTMENT SCHEDULE

APPLICABLE MODELS	WARRANTY LIMITATIONS (Whichever occurs first)		ADJUSTMENT CHARGE TO BE PAID BY THE CUSTOMER	
	Months	Transmission Miles Or Kilometers	Parts	Labor
MT, MD 3000, 3200, 3500, 3700	0-24	No Limit	No Charge	No Charge
HT with Hydraulic Controls	0-24	No Limit	No Charge	No Charge
AT, 1000 Series™, 2000 Series™, 2400 Series™	0-36	No Limit	No Charge	No Charge
HT with Electronic Controls	0-60	No Limit	No Charge	No Charge
HD 1000 EVS, 2100 EVS, 2200 EVS 2350 EVS, 2500 EVS, 2550 EVS, 3000 EVS, 3500 EVS, 4000, 4000 EVS, 4500, 4500 EVS, 4700, 4700 EVS, 4800, 4800 EVS	0-60	No Limit	No Charge	No Charge

WHAT IS NOT COVERED

- **DAMAGE DUE TO ACCIDENT, MISUSE, or ALTERATION** — Defects and damage caused as the result of any of the following are not covered:
 - Flood, collision, fire, theft, freezing, vandalism, riot, explosion, or objects striking the vehicle;
 - Misuse of the vehicle;
 - Installation into unapproved applications and installations;
 - Alterations or modification of the transmission or the vehicle, and
 - Damage resulting from improper storage (refer to long-term storage procedure outlined in the applicable Allison Service Manual).
 - Anything other than defects in Allison Transmission material or workmanship

NOTE: This warranty is void on transmissions used in vehicles currently or previously titled as salvaged, scrapped, junked, or totaled.

- **CHASSIS, BODY, and COMPONENTS** — The chassis and body company (assemblers) and other component and equipment manufacturers are solely responsible for warranties on the chassis, body, component(s), and equipment they provide. Any transmission repair caused by an alteration(s) made to the Allison transmission or the vehicle which allows the transmission to be installed or operated outside of the limits defined in the appropriate Allison Installation Guideline is solely the responsibility of the entity making the alteration(s).
- **DAMAGE CAUSED by LACK of MAINTENANCE or by the USE of TRANSMISSION FLUIDS NOT RECOMMENDED in the OPERATOR'S MANUAL** — Defects and damage caused by any of the following are not covered:
 - Failure to follow the recommendations of the maintenance schedule intervals applicable to the transmission;
 - Failure to use transmission fluids or maintain transmission fluid levels recommended in the Operator's Manual.
- **MAINTENANCE** — Normal maintenance (such as replacement of filters, screens, and transmission fluid) is not covered and is the owner's responsibility.
- **REPAIRS by UNAUTHORIZED DEALERS** — Defects and damage caused by a service outlet that is not an authorized Allison Transmission Distributor or Dealer are not covered.
- **USE of OTHER THAN GENUINE ALLISON TRANSMISSION PARTS** — Defects and damage caused by the use of parts that are not genuine Allison Transmission parts are not covered.
- **EXTRA EXPENSES** — Economic loss and extra expenses are not covered. Examples include but are not limited to: loss of vehicle use; inconvenience; storage; payment for loss of time or pay; vehicle rental expense; lodging; meals; or other travel costs.
- **"DENIED PARTY" OWNERSHIP** — Warranty repair parts and labor costs are not reimbursed to any participating or non-participating OEMs, dealers or distributors who perform warranty work for, or on behalf of, end users identified by the United States as being a "denied party" or who are citizens of sanctioned or embargoed countries as defined by the U.S. Department of Treasury Office of Foreign Assets Control. Furthermore, warranty reimbursements are not guaranteed if the reimbursement would be contrary to any United States export control laws or regulations as defined by the U.S. Department of Commerce, the U.S. Department of State, or the U.S. Department of Treasury.

OTHER TERMS APPLICABLE TO CONSUMERS AS DEFINED by the MAGNUSON-MOSS WARRANTY ACT

This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

Allison Transmission does not authorize any person to create for it any other obligation or liability in connection with these transmissions. **ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE APPLICABLE TO THESE TRANSMISSIONS IS LIMITED IN DURATION TO THE DURATION OF THIS WRITTEN WARRANTY. PERFORMANCE OF REPAIRS AND NEEDED ADJUSTMENTS IS THE EXCLUSIVE REMEDY UNDER THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY. ALLISON TRANSMISSION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES (SUCH AS, BUT NOT LIMITED TO, LOST WAGES OR VEHICLE RENTAL EXPENSES) RESULTING FROM BREACH OF THIS WRITTEN WARRANTY OR ANY IMPLIED WARRANTY.****

** Some states do not allow limitations on how long an implied warranty will last or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

OTHER TERMS APPLICABLE TO OTHER END-USERS

THIS WARRANTY IS THE ONLY WARRANTY APPLICABLE TO THE ALLISON TRANSMISSION MODELS LISTED ABOVE AND IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. ALLISON TRANSMISSION DOES NOT AUTHORIZE ANY PERSON TO CREATE FOR IT ANY OTHER OBLIGATION OR LIABILITY IN CONNECTION WITH SUCH TRANSMISSIONS. ALLISON TRANSMISSION SHALL NOT BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM BREACH OF THIS WARRANTY OR ANY IMPLIED WARRANTY.

QUESTIONS

If you have any questions regarding this warranty or the performance of warranty obligations, you may contact any Allison Transmission Distributor or Dealer or write to:

Allison Transmission, Inc.
P.O. Box 894
Indianapolis, IN 46206-0894
Attention: Warranty Administration PF-9

CONDITIONAL 5-YEAR WARRANTY POLICY

WATEROUS warrants, to the original Buyer only, that products and parts manufactured by WATEROUS will be free from defects in material and workmanship under normal use and service for a period of five (5) years from the date the product is first placed in service, or five and one-half (5-1/2) years from the date of shipment by Waterous, whichever period shall be the first to expire; provided the Buyer notifies WATEROUS, in writing, of the defect in said product within the warranty period, and said product is found by WATEROUS to be nonconforming with the aforesaid warranty. When required in writing by WATEROUS, defective products must be promptly returned by Buyer to WATEROUS at WATEROUS' plant at South St. Paul, Minnesota, or at such other place as may be specified by WATEROUS, with transportation and other charges prepaid. A **Returned Material Authorization (RMA)** is required for all products and parts and may be requested by phone, fax or mail. The aforesaid warranty excludes any responsibility or liability of WATEROUS for:

- (a) damages or defects due to accident, abuse, misuse, abnormal operating conditions, negligence, accidental causes, use in non-firefighting applications, or improper maintenance, or attributable to written specifications or instructions furnished by Buyer;
- (b) defects in products manufactured by others and furnished by WATEROUS hereunder, it being understood and agreed by the parties that the only warranty provided for such products shall be the warranty provided by the manufacturer thereof which, if assignable, WATEROUS will assign to Buyer, if requested by Buyer;
- (c) any product or part, altered, modified, serviced or repaired other than by WATEROUS, without its prior written consent; and
- (d) the cost of dismantling, removing, transporting, storing, or insuring the defective product or part and the cost of reinstallation.
- (e) normal wear items (packing, strainers, filters, light bulbs, anodes, intake screens, mechanical seals, etc.).

This warranty is subject to WATERLOUS' Conditions of Sale (Waterous Company form number F-2190) as currently in effect all of which are herein incorporated and by this reference made a part hereof.

All other warranties are excluded, whether express or implied by operation of law or otherwise, including all implied warranties of merchantability or fitness for purpose. WATEROUS shall not be liable for consequential or incidental damages directly or indirectly arising or resulting from the breach of any of the terms of this limited warranty or from the sale, handling, or use of any WATEROUS product or part. WATEROUS' liability hereunder, either for breach of warranty or for negligence, is expressly limited at WATEROUS' option:

- (A) to the replacement at the agreed point of delivery of any product or part, which upon inspection by WATERLOUS or its duly authorized representative, is found not to conform to the limited warranty set forth above, or
- (B) to the repair of such product or part, or
- (C) to the refund or crediting to buyer of the net sales price of the defective product or part.

Buyer's remedies contained herein are exclusive of any other remedy otherwise available to Buyer.

Waterous Company
125 Hardman Avenue South
South St. Paul, MN 55075 USA
www.waterousco.com



F-23 13 (02/97)

UNITED PLASTIC FABRICATING, INC.



WARRANTY

FOR: POLY-TANK®, POLYSIDE®, INTEGRATOR™, ELLIPSE™, ELLIP-T-TANK™ & DEFENDER™

LIFETIME SERVICE WARRANTY

United Plastic Fabricating, Inc. (hereinafter called "UPF") warrants each POLY-TANK®, Booster/Foam Tank POLYSIDE® Wetside Tank, Integrator Tank/Body, ELLIPSE™ Elliptical Tank, Ellip-T-Tank Tank and DEFENDER™ Skid Tank to be free from defects in material and workmanship for the service life of the original vehicle (vehicle must be actively used in an emergency response for fire suppression). All UPF Tanks must be installed and operated in accordance with the UPF Installation and Operating Guidelines. Failure to do so can void the warranty.

Every UPF Tank is inspected and tested before leaving our facility. Should your UPF Tank require service, please notify UPF via email, fax, in writing or by calling UPF at 1-978-975-4520. Please provide the serial number, a description of the service request, the location along with the phone number and name of the contact person. Our goal is to have scheduled work completed within a reasonable time period.

Under a valid warranty claim, UPF will cover the cost to repair the UPF Tank including the customary and reasonable costs to make the tank accessible such as the removal and reinstallation of the tank if authorized in advance (pre-approved) by UPF. The warranty will not cover tanks that have been improperly installed, operated, misused, abused, or modified from its intended or designed use. Serial number must not have been altered, defaced or removed. Tanks that are not stored or installed properly which results in the tank suffering UV damage will not be covered by this agreement.

Should UPF determine that the service claim is valid under this warranty for a tank located outside of the United States and Canada, UPF will assume the costs for labor and material for the warranty repair as described above plus all travel costs to the U.S. port of embarkation. Costs for airline travel outside of the U.S. and Canada will not be the responsibility of UPF.

In the event the tank shall become stationed in an area of the world that is considered to be a war zone or where unsafe conditions exist for the safe passage of United States Nationals, as reported by the United States Department of State, (<http://www.state.gov>), and a request to perform service or warranty repairs, UPF reserves the right to refuse to honor such requests. It is the purchaser's responsibility to relocate the tank to an area where such repairs can be performed without undue risk to UPF employees or their designee. UPF will make every reasonable effort to support our products through alternative means.

For Ellipse™ elliptical tanks, a separate five year warranty provided by the subcontractor is applied to the sub-frames, chute linings (rubber isolation strips) and metal components. The stainless steel wrap provided by UPF shall be warranted by the subcontractor performing the wrap installation in accordance with their warranty in place at the time of the installation. UPF will not be liable for any warranty costs associated with the wrap, sub-frames, chute linings (rubber isolation strips) and metal components but will assist with all claims on behalf of its customer.

For PolySide® wetsided tanks and Integrator™ Tank/Body units, all polypropylene components related to the tank shall carry the standard UPF lifetime

Continued on back



UNITED PLASTIC FABRICATING, INC.

WARRANTY

FOR: POLY-TANK®, POLYSIDE®, INTEGRATOR™, ELLIPSE™, ELLIP-T-TANK™ & DEFENDER™

service warranty. Other polypropylene components, including but not limited to compartments, wheel wells, fenders and other body related components shall be warranted by UPF for a period of ten years. The warranty for the PolySide® and Integrator™ units excludes paint or hardware, which shall be covered by the manufacturer of the paint/hardware.

All UPF tanks 50 gallons or less utilized for non-fire applications and installed on specialty vehicles such as ATVs, trailers, boats, etc. are covered under a separate warranty policy available from UPF. Further, UPF Protector™ foam and water trailers are warranted under a separate warranty policy available from UPF.

This UPF warranty is transferable within the United States only with prior written approval by UPF (except an original apparatus manufacturer may assign this warranty to the first titled owner/lessee of the apparatus).

UPF will NOT reimburse any unnecessary work and/or work that has not been pre-approved. Any and all third party charges must be pre-authorized and approved in writing by UPF prior to commencing the work. Any unauthorized third party repairs, alterations, actions or modifications will not be covered and can void the warranty. UPF will be the sole determining authority as to whether a service claim will be valid and covered under this warranty.

In no event will UPF be liable for an amount in excess of the purchase price of the booster/foam tank at the time of manufacture or for any loss or damage, whether direct, indirect, incidental, consequential, or otherwise arising out of failure of its product. Loss of contents (water, foam, etc.) shall not be the responsibility of UPF. Further, UPF is not responsible for costs associated with service repairs to chassis, sub-frames, bodies, valves, dumps, hoses, pressure vacuum vents, and other components (i.e. liquid level transducers, etc.). Further, UPF will not cover the cost for travel of the vehicle to and from a repair facility.

This warranty contains the entire warranty. It is the sole warranty and price agreements or representation, whether oral or written, are either merged herein or expressly cancelled. UPF neither assumes, nor authorizes any person supposing to act on its behalf to change, nor assume for it, any warranty or liability concerning its product.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state. Some states do not allow exclusion or limitation or incidental or consequential damage, so the above limitation or exclusion may not apply to you. Since some states do not allow limitations on the length of an implied warranty, the above limitation may not apply to you.

THERE ARE NO WARRANTIES, EXPRESSED OR IMPLIED, WHICH EXTEND BEYOND THE DESCRIPTION OF THE FACE HEREOF. THERE IS NO EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR A WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE. ADDITIONALLY, THIS WARRANTY IS IN LIEU OF ALL OTHER OBLIGATION OR LIABILITIES ON THE PART OF UPF.

POLY-TANK®, POLYSIDE® are registered trademarks of UPF, Inc. INTEGRATOR™, ELLIPSE™, ELLIP-T-TANK™ & DEFENDER™ are trademarks of UPF, Inc. © 08/01/09 UPF, Inc. Printed in the USA

AKRON BRASS 10 YEAR WARRANTY ON HEAVY DUTY SWING-OUT™ VALVES

Akron Brass warrants Heavy Duty Swing-Out Valves for a period of ten (10) years after purchase against defects in material or workmanship. Akron Brass will repair or replace any Heavy Duty Swing-Out Valve which fails to satisfy this warranty. Repair or replacement shall be at the discretion of Akron Brass. Electrical components shall carry our standard five (5) year warranty. We will not be responsible for: wear and tear; any improper installation, use or maintenance; negligence of the owner or user; repair or modification after delivery; failure to follow our instructions or recommendations; or anything else beyond our control. WE MAKE NO WARRANTIES, EXPRESS OR IMPLIED, OTHER THAN THOSE INCLUDED IN THIS WARRANTY STATEMENT, AND WE DISCLAIM ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE. Further, we will not be responsible for any consequential, incidental or indirect damages (including, but not limited to, any loss of profits) from any cause whatsoever. No person has authority to change this warranty.

**HEAVY
DUTY**
Swing-Outs
Proven Performance Trusted By Firefighters
For Over Half a Century



 **AKRON**
BRASS COMPANY
An ISO 9001: 2000 Registered Company



Pierce Warranty Statement for Gortite Roll Up Doors Rev 2/24/2011

All mechanical components of the door shall be warranted to be free from defects in materials and workmanship for the lifetime of the vehicle. All parts covered under this warranty shall be to the original owner.

A&A manufacturing warrants that painted doors shall be free of blistering, peeling, bubbling, or any other adhesion defect caused by defective manufacturing methods or paint material selection. The time period for the coverage shall be 6 years from date of door shipment to Pierce. Satin anodized finish doors shall be warranted for 6 years against corrosion defects from date of door shipment to Pierce. Replacement of decals/Scotchlite is not covered.

The maximum amount A&A will reimburse for labor is \$60.00 per hour and the maximum amount of time allowed for repair is as follows:

Door	1.0 Hr.
Slat Replacement	1.0 Hr.
Pennant Plate Replacement	1.0 Hr.
Roller Replacement	.5 Hr.
Seal Replacement	.5 Hr.
Switch/Magnet Replacement	1.0 Hr.
Travel Time	4.0 Hr.



Certification Document CD0089

Statement of Compliance to NFPA 1901-2009

Vehicle Stability

Pierce fire apparatus comply with NFPA 1901 Section 4.13 Vehicle Stability using the tilt table method. As prescribed by the standard, each apparatus is compared to a substantially similar apparatus that has been loaded as required and tested on a tilt table per the SAE J2180 test procedure. If the apparatus configuration was not expected to meet the minimum tilt table criteria, then it will be equipped with the Electronic Stability Control option. A listing of all tested apparatus is maintained by the Research and Development lab and is available for inspection at the Appleton factory.



4.13 Vehicle Stability.

4.13.1* Rollover Stability. The apparatus shall meet the criteria defined in 4.13.1.1, or it shall be equipped with a stability control system in accordance with 4.13.1.2.

4.13.1.1 The apparatus shall meet the criteria defined in either of the following:

- (1)* The apparatus shall remain stable to 26.5 degrees in both directions when tested on a tilt table in accordance with SAE J2180, A Tilt Table Procedure for Measuring the Static Roll-over Threshold for Heavy Trucks.
- (2) The calculated or measured center of gravity (CG) shall be no higher than 89 percent of the rear axle track width.

4.13.1.1.1 Compliance shall be certified by testing, calculating, or measuring the apparatus or by comparing the apparatus to a compliant, substantially similar example apparatus, and the certification shall be delivered with the fire apparatus.

4.13.1.1.2 The example apparatus shall be considered substantially similar if it includes a chassis with the same or higher CG height, the same or narrower rear axle track width, the same or greater water tank size and CG height, the same type of front and rear suspension, and the same type and size of aerial device.

4.13.1.1.3 For purposes of 4.13.1.1, the apparatus shall be loaded with fuel, fire fighting agents, hose, ladders, a weight of 250 lb in each seating position, and weight equivalent to the miscellaneous equipment allowance as defined in Table 12.1.2.

4.13.1.1.3.1 If the apparatus is designed to meet a specified higher equipment loading or larger hose bed capacity or to carry additional ground ladders, these greater loads shall be included in the testing, calculating, or measuring.

4.13.1.1.3.2 The weight added to the fire apparatus for the purpose of test, calculation, or measurement shall be distributed to approximate typical in service use of the fire apparatus while not exceeding the manufacturer's published individual compartment weight ratings.

4.13.1.2 If the apparatus is equipped with a stability control system, the system shall have, as a minimum, a steering wheel position sensor, a vehicle yaw sensor, a lateral accelerometer, and individual wheel brake controls.

VALIDATION TEST: Multiple Tests

Pierce Manufacturing, Inc.



James Roger Lackore, PE
November 18, 2010



Certification Document CD0084 Pierce Engineering Methodology

Every Pierce custom fire apparatus undergoes an extensive configuration and custom design process. Engineers and designers from Pierce's design staff review the specification, creating a master package of bills of material and engineering drawings before the manufacturing process is begun.

Part drawings are created using computer-aided-design (CAD) software to ensure dimensional accuracy.

Designs are created using best industry practices including Federal Motor Vehicle Safety Standards (FMVSS), National Fire Protection Association (NFPA) guidelines, and Society of Automotive Engineers (SAE) recommended practices.

Design reviews on each truck include:

- Weight Distribution
- Axle Capacity
- Driveline Analysis
- Hose Capacity
- Electrical Amperage Draw
- Lighting and Conspicuity

Pierce Manufacturing, Inc.

A handwritten signature in black ink, appearing to read "James R. Lackore".



James Roger Lackore, PE
October 28, 2009

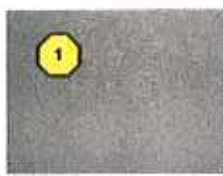


Certification Document CD0020

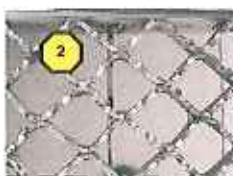
Stepping, Standing & Walking Areas

Slip Resistance Certification

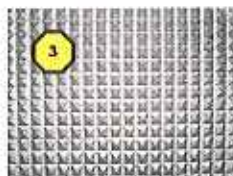
Pierce Manufacturing certifies that samples of the following interior and exterior stepping, standing and walking surfaces used in the manufacture of Pierce custom and commercial fire apparatus conform to the requirements of NFPA 1901, 2009 edition paragraphs 15.7.4.1 and 15.7.4.2 when tested using an English XL Variable Incidence Tribometer.



Anti-Slip Adhesive Tape



Rustin Firm-Grip



Cast Pyramids



Diamond Plate (Aluminum)



Diamond Plate Edge Punch



Duradek



Eberhard Folding Step



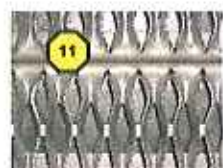
Freightliner Step



Grip Strut (Aluminum .080)



Grip Strut Aluminum 12 Ga



Grip Strut (Steel 12 Ga)



International Step



Kenworth Step



Morton Cass



Octagonal Punch



OverKrete Coating



Rubber Mat



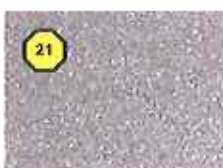
Serration and Knurl



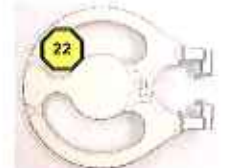
Loncoin II



Lonplate I



Thermach
(Stainless Coating)



Trident Luminescent
Folding Step



Line-X
(Spray-On Coating)



Rhino Lining
(Spray-On Coating)



Durahak SSV 170



Turtle Tile w/Grit Surface



Step Slot



Gortite Stepping Surface

VALIDATION TESTS:

RD1008	Surfaces	1 – 18
RD1153	Surfaces	19 – 20
RD1195	Surface	21
RD1219	Surface	22
RD1232	Surface	23
RD1227	Surface	24
RD1633	Surface	25
RD1942	Surface	26
RD1948	Surface	27
RD2027	Surface	28

Pierce Manufacturing, Inc.



James Roger Lackore, PE
December 1, 2008



Certification Document CD0073 NFPA Lighting Requirements

Pierce Manufacturing, Inc. certifies that each apparatus lighting configuration is reviewed to ensure compliance with the requirements of NFPA 1901 and NFPA 1906 guidelines.



The highly customized nature of fire apparatus is particularly exemplified in the selection of lighting packages. Most fire departments have individual lighting desires based on performance and fleet commonality. Each Pierce apparatus lighting configuration is therefore reviewed to ensure that the lights selected will conform to the lighting supplier's guidelines for conformance to the NFPA standards. Pierce ensures that the lighting system is installed within the geometric parameters specified by the manufacturer of the lighting products. Optical source tests upon which these parameters are based are the responsibility of the lighting manufacturer.

Pierce Manufacturing, Inc.

A handwritten signature in black ink, appearing to read "James R. Lackore".



James Roger Lackore, PE
July 20, 2009



Certification Document CD0022
Freightliner
Cab Integrity Certification

Freightliner certifies the integrity of their cab relative to occupant protection.

DAIMLER

Bob Johnson
Sr. Compliance Analyst
Compliance and Regulatory Affairs

Daimler Trucks North America LLC
4747 N. Chennel
Portland, OR 97208-3849
503-745-5076 Phone
503-745-5544 Fax
Bob.johnson@daimler.com

November 7, 2008

To whom it may concern,

Daimler Trucks North America LLC assures the cab strength of FreightlinerM2 and Cascadia vehicles conform to the test requirements of SAE J2422 Roof Crush (US), ECE R29 Backwall Impact (European) and TSVS 1981:21 A-pillar Impact (Swedish). The SAE J2420 applies only to COE vehicles so we have not chosen to apply it to Conventionals.

Sincerely,

A handwritten signature in black ink that reads "Bob Johnson".

Bob Johnson
Sr. Compliance Analyst



Certification Document CD0061
Pierce Poly Tank Fabrication Capability

United Plastic Fabricating, Inc. acknowledges that Pierce facilities are capable and certified to install poly water tanks.



UNITED PLASTIC FABRICATING, INC.

165 Flagship Drive, North Andover, MA 01845
Phone: 1-800-638-8265 • Fax: 1-800-866-4520
www.unitedplastic.com

14 May 2002

Pierce Manufacturing, Inc.
2600 American Drive
Appleton, WI 54913

RE: Certification as Authorized Representative/Installer of UPF Poly-Tanks®

This letter is the required Certification to acknowledge that Pierce Manufacturing, Inc. is an authorized representative and installer of the United Plastic Fabricating, Inc. product line including the UPF Poly-Tank®, the UPF PolySide™ wetside tank, the UPF Ellipse™ elliptical tank and the UPF Defender™ slip-on tanks.

This certification of the adherence to the UPF recommended Installation Guidelines for handling, sub-frame fabrication, mounting, and testing are based on inspections and reviews of the Pierce processes. With more than 7,000 Poly-Tank® installations, Pierce Manufacturing's facilities in Appleton, WI; Ontario, CA; and Bradenton, FL are all authorized as UPF installation facilities.

Should there be any questions regarding this Certification, please direct them to Michael Ashley, Vice President of Engineering or William Bruns, Vice President of Sales & Marketing at UPF. They may be reached at 1-800-638-8265.

Respectfully Submitted,

A handwritten signature in black ink, appearing to read "William Bruns".

William Bruns
Vice President



Certification Document CD0083 Water Tank Capacity

Pierce Manufacturing, Inc. has received certification that UPF Tanks are certified to meet the nominal tank capacity.



UNITED PLASTIC
FABRICATING, INC.

WILLIAM BRUNS
Vice President Sales & Marketing
(978) 939-0264

25 August 2009

To Whom It May Concern:

United Plastic Fabricating, Inc. (UPF) certifies that each tank manufactured for Pierce Manufacturing, Inc. meets, at a minimum, the usable liquid capacity indicated by the nominal tank capacity ordered. For the purposes of NFPA certification be it understood that while each tank is provided with an exact usable liquid capacity certification at the time the tank is delivered, the capacity will never be less than the nominal capacity. Pierce can be assured that a UPF tank will always be manufactured to provide slightly greater capacity than nominal.

Respectfully Submitted,

A handwritten signature in cursive script that reads "William Bruns".

William Bruns
Vice President
Sales & Marketing

United Plastic Fabricating, Inc. • 165 Flagship Drive, N. Andover, Massachusetts 01810
Fax: (978) 691-8343
e-mail: bruns@unitedplastic.com
web: www.unitedplastic.com



**Certification Document CD0054
ISO Certification – Pierce Bradenton**

Pierce Manufacturing, Inc. facilities in Bradenton, Florida have received ISO 9001:2000 Certification.

Certificate of Registration

nqa global assurance

This is to certify that the Quality Management System of:

Pierce Manufacturing Inc., Florida Division
1512 38th Avenue East
Bradenton, FL 34208

applicable to:

The design, manufacture and repair of fire and emergency apparatus

has been assessed and approved by
National Quality Assurance, U.S.A., against the provisions of:

ISO 9001: 2008

K M Brand
For and on behalf
of NQA, USA, Acion, MA 01720

ANAB
ACCREDITED

Certificate Number: 12619
EAC Code: 18
First Issued: November 16, 2008
Valid Until: November 1, 2015
Reissued: November 1, 2012

Page 1 of 1
This approval is issued to the company maintaining its system to the required standard, which will be monitored by NQA, USA, an accredited organization under the ANSI-ISO National Accreditation Board.



Certification Document CD0062 Pierce Welder Certification

Pierce Manufacturing Inc. (PMI) is certified to ISO Quality Standard 9001, which includes the oversight and quality assurance of all welding operations.

PMI also adheres to the National Fire Protection Association (NFPA) Standard 1901 which specifies the following welding codes:

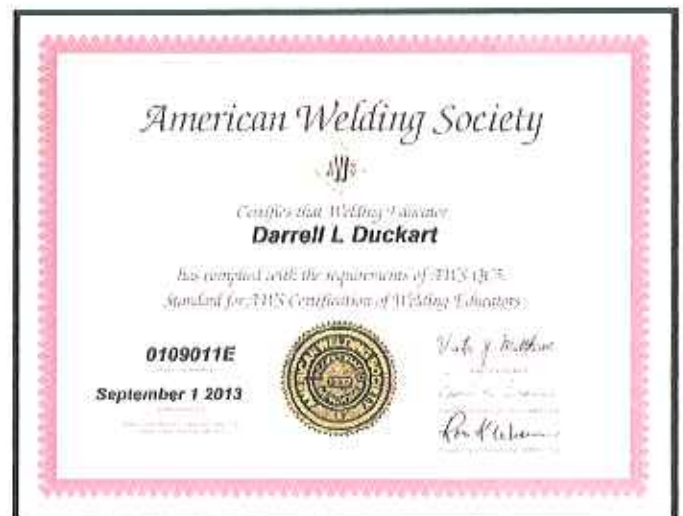
- AWS D1.1, Structural Welding Code – Steel
- AWS D1.2, Structural Welding Code – Aluminum
- AWS D1.3, Structural Welding Code - Sheet Steel.

PMI ensures that all welders working on fire apparatus are properly qualified and trained, and that they maintain their qualification. All welders are subject to:

- Pre-Employment Weld Skill Evaluation
- Initial Welder Training/Certification Program
- Welder Re-certification Schedule.

PMI's welder qualification program is administered by weld educators and inspectors certified by the American Welding Society.

The following individuals are located at the Appleton, Wisconsin facility.





The following individual is located at the Bradenton, Florida facility.





LAKE COUNTY ITB NO.: 14-0601 FIRE APPARATUS

EXCEPTIONS TO SPECIFICATIONS

- 1. Page 24 The rear suspension provided will be rated at 26,000 pounds to match the rear axle rating. A larger suspension for this axle is not available. The 26k suspension is equipped with auxiliary helper springs, as required by the ITB.**
- 2. Page 27 The hoses provided on the engine and turbo plumbing will be Gates "Bluestripe" hoses. Silicone hoses are not available from Freightliner on this chassis.**
- 3. Page 27 The largest fuel tank available is a 50-gallon tank due to increased emissions equipment located in the under cab step areas.**

2904 59th Ave Dr East
Bradenton, FL 34203
Phone: 941-756-7779
Fax: 941-756-2598
Toll Free: 800-228-8368



IN SERVICE TO SERVE YOU

Web Site: www.ten8fire.com

E-Mail: info@ten8fire.com

141 Maritime Drive
Sanford, FL 32771
Phone: 407-328-5081
Fax: 407-328-8053
Toll Free: 866-328-5081



One of the most important considerations in the purchase of Fire or Rescue Vehicles is the service available after delivery. Prompt response to warranty items and long term repairs are of prime importance to us as well. We pride ourselves in customer care and the confidence we have earned from customer experience.

Ten-8 Fire Equipment Inc. is located in Bradenton, Florida. We have Pierce Factory Certified Service Centers located in Bradenton and Sanford. Eight (8) service vehicles are strategically located throughout Florida in order to serve our customers. Our service department has 28 employees. Our seven (7) EVT Certified Technicians include three (3) Master, one (1) Level 3, and two (2) Level 2.



Ten-8 Fire Equipment Inc. Service Centers are certified pump repair facilities for both Waterous and Hale Fire Pumps. We currently stock over \$350,000 in spare parts and related items needed for quick and efficient response to customer needs. We service all makes of fire and emergency vehicles.

Ten-8 Fire Equipment Inc. offers emergency repair service twenty-four (24) hours a day, seven (7) days a week.

We invite you to visit our facilities at any time or call our customers for references.



PERFORM LIKE NO OTHER.





Electrical Analysis Report

9/16/2013

Bid #: 356 Lake County FL Pumper 2014

Representative: Boggus, Robert
Organization: Ten-8 Fire Equipment, Inc

Option Code	Description	Type*	Minimum Load	Intermittent Load	Additional Load
0001247	High Idle w/Electronic Engine, Commercial		.00	1.20	.00
0002464	Light, Map, Federal LF18TS, Goose Neck, Toggle Switch		.00	.50	.00
0005780	Control, Air Horn at Pump Panel		.00	.16	.00
0005940	Lights, Engine Compt, (2) Commercial Chassis		.00	3.20	.00
0005945	Light, Pump Compt		.00	1.80	.00
0016064	Control, Air Horn, Horn Ring, PS Push Button		.00	.83	.00
0039204	Lights, Backup, Whelen 600, Halogen		.00	5.47	.00
0060753	Water Level Gauge, Whelen PSTANK, LED 1-Light, 4-Level		.00	.00	1.00
0067248	Lights, Rear Scene, Whelen 600 Halogen		.00	.00	8.00
0072153	Primer, Trident, Air Prime, Air Operated		.00	.01	.00
0543848	Light, Do Not Move Apparatus, Whelen 5SR00FRR LED		.00	1.00	.00
0544332	Portable Hand Light, Provided by Fire Department, Pumper NFPA Classification		.00	.50	.00
0549333	Indicators, Engine, Included with Pressure Controller		.00	.35	.00
0582637	Air Conditioning, with Auxillary Crew Cab Unit, Freightliner (Req Special Exhaust)		.00	3.00	3.00
0582830	Single Start, (3) Grp 31, 2280 CCA, Freightliner M2-106		.00	3.00	.00
0582839	Fuel/Water Separator, Alliance, FLR M2-106		.00	.00	15.62
0582911	Fuel Repriming Pump Included with Alliance Fuel / Water Separator, FLR M2-106		.00	6.00	.00
0589905	Alarm, Back-up Warning, PRECO 1040		.00	.50	.00
0650469	Spotlight, Golight/RadioRay®, Model 20**, Halogen, 1 Lt		.00	.00	5.50
0690442	Light, FRC, 12V FCA530-V15, LED, Push Up, Side Mount 1st		.00	.00	26.00
0548004	Wiring, Spare, 15 A 12V DC 1st	LM	.00	.00	30.00
0548016	Wiring, Spare, 30 A 12V DC 2nd	LM	.00	.00	30.00
0548017	Wiring, Spare, 30 A 12V DC 3rd	LM	.00	.00	30.00
0002758	Amp Draw, NFPA Radio Allowance	NFPA	5.00	.00	.00
0005926	Light, Open Door - Comm Std	NFPA	.95	.00	.00
0005947	Lights, Perimeter Scene Cab Exits	NFPA	5.76	.00	.00
0005955	Lights, Deck, Unity (2) AG, Rear, (1) Spot, (1) Flood	NFPA	7.80	.00	.00
0020881	ABS, Wabco Anti-Lock Braking System, Commercial	NFPA	.60	5.40	.00
0040194	Load Manager, Kussmaul 2 Channel	NFPA	.56	.56	.00
0055987	Trans, Automatic, Allison 3000 EVS, w/(2) PTO Provsions, FLR	NFPA	2.00	2.00	.00
0058311	Fuel Tank, 50 gal. Aluminum, LH Only, FL, M2-106/112	NFPA	.08	.00	.00
0063662	DS 161" Rollup, Full Height Front & Rear, FDLER	NFPA	4.50	.00	4.50
007369	PS 161" Rollup, Full Height Front & Rear, FDLER	NFPA	4.50	.00	4.50
0072620	Wiper control, intermittent feature Commercial	NFPA	1.20	4.80	.00
0076753	Lights, Side Zone Lower, Whelen Super 600 LED, Over 25 Foot Gap, 3pr	NFPA	3.65	5.47	.00

* UDMC = User Defined Mission Critical, LM = User Defined Load Managed, S = Electrical Amperage Supply



Electrical Analysis Report

9/16/2013

Bid #: 356 Lake County FL Pumper 2014

Representative: Boggus, Robert
Organization: Ten-8 Fire Equipment, Inc

Option Code	Description	Type*	Minimum Load	Intermittent Load	Additional Load
0076758	Lights, Rear Zone Lower, Whelen Super 600 LED	NFPA	.25	.00	.00
0079583	Lights, Front Zone, Whelen Super 600 LED, Comm	NFPA	.76	.00	.00
0083702	Rear - Rollup Dr/51.25" FF	NFPA	.90	.00	.90
0088745	Light, Rear Zone Upper, Whelen L31HRFN LED Beacon, Red LED	NFPA	4.00	.00	.00
0092705	Gauge, Water Level, FRC, WLA200 Series, Tank Vision	NFPA	1.23	.00	.00
0509494	Lights, Cab and Crew Cab Access Steps, P25, LED, 8 Lights	NFPA	.28	.28	.00
0511567	Lights, Identification/Clearance, Rear, Truck-Lite, 15050R and P25 LED	NFPA	1.75	.00	.00
0525667	Siren, Whelen 295SLSA1, 100 or 200 Watt	NFPA	1.56	14.06	.00
0535256	Shift, Air w/ Manual Over, Split Shaft PTO, Waterous	NFPA	1.00	.00	.00
0537198	Light, Directional/Marker, Intermediate Light, Weldon, 9186-8580-29 LED 2lts	NFPA	.20	.60	.00
0554049	Lightbar, Whelen, Freedom, FN**QLED, 4-R, 2-W, 2-RC, LED Opt	NFPA	8.64	2.92	.00
0556360	Lights, Step, P25 LED 4lts	NFPA	1.00	.00	.00
0564941	Controller, Pressure, FRC, Pump Boss, PBA200	NFPA	1.80	.00	.00
0582743	Cab Lighting, LED Marker Lights, Freightliner	NFPA	5.72	7.90	.00
0582756	Cab, 4-door, High-Roof, Freightliner, M2-106	NFPA	28.60	8.45	27.95
059382	Engine Indicators, Included With Pressure Controller	NFPA	.30	.00	.00
0593161	Light Shield, S/S LED	NFPA	3.00	.00	.00
0644414	Air Dryer, Brake, AD-IP w/Heater, FLR	NFPA	4.70	.00	.00
0650151	Engine, Cummins ISL, 350 hp, FL M2-106, 4x2/4x4, 2013 Emissions	NFPA	1.00	.00	.00
0650678	Lights, Tail, Whelen 60BTT* Red LED Stop/Tail & 60A00TAR Amb LED Dir w/Flange	NFPA	.50	1.50	.00
0655677	Lights, Perimeter Scene, Truck-Lite 40227C Incd, Pump Panel/Rear Step 4lts	NFPA	5.76	.00	.00
0664481	Bracket, License Plate & Light, P25 LED	NFPA	.07	.00	.00
0595797	Alternator, 275 amp, Delco Remy, 40-SI, FLR	S			
Load Totals:			<u>109.62</u>	<u>81.46</u>	<u>186.97</u>

Note: Minimum Continuous Load is in "Blocking Right of Way" mode. (Reference current edition of NFPA 1901)

Note: Intermittent Load items are not factored in on any alternator load comparisons. These items are included on the report for reference only and should be looked at as amp draw exclusion items. (Reference current edition of NFPA 1901)

Note: Total Connected Load "Demand" represents Total Connected Load minus any Load Managed items

Alternator Output at Idle: 148.00

Minimum Continuous Load	
Supply:	148.00
Demand:	109.62
Variance: 38.38	

Alternator Output at Governed Speed: 217.00

Total Connected Load	
Supply:	217.00
Demand:	206.59
Variance: 10.41	

* UDMC = User Defined Mission Critical, LM = User Defined Load Managed, S = Electrical Amperage Supply

Ten-8 Fire Equipment, Inc
2904 59th Ave. Dr. E. Bradenton, FL 34203
Phone: 800-228-8368 or 941-756-7779, Fax: 941-756-2598
Mobile PM Schedules and Annual Cost

PM Level I: (Inspection and service pump test every 12 months.)

- A) Annual inspection and pump test performed at the customer's location.
- B) No repairs are included. Parts and labor will be billed separately.
- C) Option: Two hour performance pump test add \$200.00

Cost:	Pumper	\$620.00
	Aerial w/o pump	\$556.00
	Aerial with pump	\$746.00

PM Level II: (Inspections and servicing every 6 months.)

- A) Inspections and service at the customer's location.
- B) Maintenance includes servicing and oil and filter changes.
- C) Price includes labor, filters, fluids, lubricants, and light bulbs.
(excludes accessory lights such as strobes, mercury vapors, etc.)
- D) Annual service pump test at the Ten-8 service center

Cost:	Pumper	\$2391.00
	Aerial w/o pump	\$1932.00
	Aerial with pump	\$3053.00
	Rescue	\$1486.00
	Brush Truck	\$1720.00

PM Level III: (Inspection and servicing every 3 months.)

- A) Three and nine month service performed at the customer's location.
Six and twelve month service performed at the customer's location.
- B) Inspection and service transfer case at each interval.
- C) Maintenance includes service and oil and filter changes on all
applicable systems at the 6 and 12 month intervals.
- D) Price includes labor, filters, fluid, lubricants, and light bulbs.
- E) Annual service pump test at the Ten-8 service center.

Cost:	Pumper	\$3957.00
	Aerial w/o pump	\$4016.00
	Aerial with pump	\$4383.00
	Rescue	\$2352.00
	Brush Truck	\$2868.00

Discount: A 5% discount will be given with multiple truck PM's at one service visit.

Ten-8 Fire Equipment, Inc
2904 59th Ave. Dr. E. Bradenton, FL 34203
Phone: 800-228-8368 or 941-756-7779, Fax: 941-756-2598
Custom PM Schedules and Cost

PM Level I: (Inspection and service pump test every 12 months.)

- A) Annual inspection and pump test performed at the Ten-8 service center.
- B) No repairs are included. Parts and labor will be billed separately.
- C) Option: Two hour performance pump test add \$200.00

Cost:	Pumper	\$380.00
	Aerial w/o pump	\$316.00
	Aerial with pump	\$506.00

PM Level II: (Inspections and servicing every 6 months.)

- A) Inspections and service at the Ten-8 service center.
- B) Maintenance includes servicing and oil and filter changes.
- C) Price includes labor, filters, fluids, lubricants, and light bulbs.
(excludes accessory lights such as strobes, mercury vapors, etc.)
- D) Annual service pump test

Cost:	Pumper	\$1911.00
	Aerial w/o pump	\$1452.00
	Aerial with pump	\$2573.00
	Rescue	\$ 1006.00
	Brush Truck	\$1240.00

PM Level III: (Inspection and servicing every 3 months.)

- A) Three and nine month service performed at the Ten-8 service center
Six and twelve month service performed at the Ten-8 service center.
- B) Inspection and service transfer case at each interval.
- C) Maintenance includes service and oil and filter changes on all applicable systems at the 6 and 12 month intervals.
- D) Price includes labor, filters, fluid, lubricants, and light bulbs.
- E) Annual service pump test.

Cost:	Pumper	\$2997.00
	Aerial w/o pump	\$3056.00
	Aerial with pump	\$3423.00
	Rescue	\$1392.00
	Brush Truck	\$1908.00



ORLANDO FREIGHTLINER

1-800-741-3846

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SERVICE

EN ESPAÑOL

EMPLOYMENT



Our Locations

Visit Us

Orlando Freightliner— Main Location

2455 South Orange Blossom Trail
Apopka, FL 32703

Sales Hours

M-F 8am-5pm
Sat & Sun - By appointment

Parts Department Hours

24 Hours

Service Department Hours

24 Hours

Call Us

General - 407-295-3846
Toll Free - 1-800-741-3846

Sales

Local - 407-295-3846
Toll Free - 1-800-741-3846

Parts Department

Direct - 407-296-8148

Service Department

Direct - 407-210-2124

Orlando Freightliner

2455 South Orange Blossom Trail
Apopka, FL 32703

407-295-3846
1-800-741-3846

South Parts Store

10812 Satellite Blvd.
Orlando, FL 32837

407-859-6788

Orlando Sprinter

2455 South Orange Blossom Trail
Apopka, FL 32703

407-295-3846
800-741-3846

Ocala Freightliner

3950 West Highway 326
Ocala, FL 34482

352-840-0070
877-840-0070



[View Larger Map](#)

Visit Us

South Parts Store— This Location is PARTS ONLY

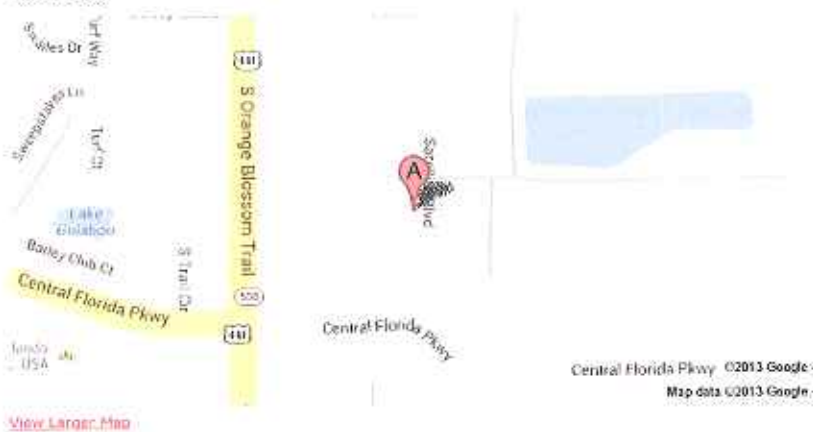
10812 Satellite Blvd.
Orlando, FL 32837

Call Us

General - 407-859-6788
Fax - 407-859-7922

Parts Department Hours

M-F 7:30am-6pm
Sat 8am-2pm
Sun Closed



[View Larger Map](#)

Visit Us**Orlando Sprinter**

2455 South Orange Blossom Trail
Apopka, FL 32703

Sales Hours

M-F 8am-5pm
Sat & Sun - Closed

Parts Department Hours

M-F 6am-12pm
Sat 6am-6pm
Sun 6am-6pm

Service Department Hours

M-F 6am-12p
Sat Closed - Available for drop off
Sun Closed - Available for drop off

Call Us

General - 407-295-3846
Toll Free - 800-741-3846

Sales

Local - 407-295-3846
Toll Free - 800-741-3846

Parts Department

Direct - 407-295-3846

Service Department

Direct - 407-210-2124



[View Larger Map](#)

Visit Us**Ocala Freightliner**

3950 West Highway 326
Ocala, FL 34482

Sales Hours

M-F 8am-5pm
Saturday - By Appointment
Sun - Closed

Parts Department Hours

M-F 7am-8pm
Sat 8am-4:30pm
Sun Closed

Call Us

General - 352-840-0070
Toll Free - 877-840-0070

Service Department Hours

M-F 8am-8pm
Sat 8am-4:30 pm
Sun Closed



Follow Us On:



1-800-741-3846 - 1-877-338-5518 (EN ESPANOL)
2455 SOUTH ORANGE BLOSSOM TRAIL APOPKA, FL 32703

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**FIRE
EQUIPMENT
INC.**

Customer:	
Apparatus:	
SVT#:	
Date:	

Operations & Functions		MAJOR	OK	N/OK
1	Road test vehicle.			
2	Check the following for proper operation:			
	Starter	Transmission Temp		
	Ammeter	Voltmeter		
	Tachometer	Air Pressure		
	Water Temp	Oil Pressure		
3	Check the following for proper operation:			
	Mech. Siren	Scene & Step Lights		
	Elec. Siren	Brake/Tail Lights		
	Air Horn(s)	Reverse Lights		
	Warning Lights	Turn Signal Lights		
	Head Lights	Marker Lights		
	Interior Lights	Spot light		
4	Check charging system.			
5	Check operation of power pump shift.			
6	Check operation of manual pump shift.			
7	Check operation of governor/manual (verneir) throttle.			
8	Check priming valve for proper operation.			
9	Check pump panel lights for condition and proper operation.			
10	Check indicator lights and gauges on pump panel for proper operation.			
11	Check fire pump heat exchanger and cooling lines for proper circulation and/or leaks.			
12	Check operation of plumbing valves.			
13	Run HVAC system. Note a/c temperature at the vent.			
14	Exercise relief valve and check for proper operation.			
15	Check for any unusual operation or noise in the pump and t-case.			
16	If two stage pump - check operation of transfer valve.			
17	Check wiper operation. Top off washer fluid. Inspect wiper blades.			
18	Inspect seat belts for proper operation and wear.			

Chassis		OK	N/OK
19	Check driveline U-Joints and flanges for tightness.		
20	Check lubrication on all driveline bearings.		
21	Check differential(s) for leaks. Drain and refill fluid. Synthetics done yearly.		
22	Check all tires for wear and air pressure.		
23	Inspect complete exhaust system.		
24	Inspect steering components.		
25	Inspect suspension.		
26	Inspect frame, cross members, and body mounts.		
27	Check entire vehicle for damage, rust, wear, etc.		
28	Drain air tanks.		



**FIRE
EQUIPMENT
INC.**

Customer:	
Apparatus:	
SVT#:	
Date:	

29	Inspect brakes & adjust if needed.		
30	Lubricate chassis.		
31	Lubricate hinges, locks, etc.		

Engine		OK	N/OK
32	Check for engine oil leaks.		
33	Check road transmission for leaks.		
34	Change coolant filter. Top off coolant.		
35	Change power steering fluid filter. Top off fluid and check for leaks.		
36	Check for fuel system for any leaks.		
37	Inspect all hoses. Check for coolant leaks.		
38	Check engine belts for condition and tightness.		
39	Check fluid level in batteries.		
40	Change engine oil and oil filter.		
41	Change fuel filters (if applicable)		
42	Change transmission fluid and filter(s) (if applicable) Synthetics yearly.		
43	Check air filter. Replace as needed. Clean spark arrestor.		

Fire Pump		OK	N/OK
44	Check pump for any fluid leaks.		
45	Change pump transmission oil.		
46	Lubricate remote control linkage.		
47	Lubricate all exposed suction valves, discharge valves, drain valves, guides, and handles.		
48	Lubricate power shift cylinder and shaft.		
49	Dry lube transfer valve operating mechanism.		
50	Check priming tank oil level and for any leaks.		
51	Check auto lube oil level and for any leaks.		
52	Change auto lube oil (if applicable)		
53	Inspect and adjust pump packing		
54	Check all suction and discharge valve threads.		

PTO Pumps		OK	N/OK
55	Check PTO Mounting Bolts.		
56	Check PTO Shaft, Coupling, or V-belts, as required.		
57	Lubricate shaft as required.		
58	Check drive unit oil level and for any leaks (if applicable).		

Hydraulic Generator		OK	N/OK
59	Check hydraulic generator for proper operation.		
60	Check system for leaks and condition of fluid.		
61	Replace filter annually		

Technician Notes & Comments



FIRE
EQUIPMENT
INC.

Customer:	
Apparatus:	
SVT#:	
Date:	



**LAKE COUNTY FIRE RESCUE
ITB 14-0601 FIRE APPARATUS**

BASIC FREIGHTLINER WARRANTY: 3 YEARS/100,000 MILES

AVAILABLE WARRANTIES FROM FREIGHTLINER

12-MONTH TOWING WARRANTY	\$188.00
24-MONTH TOWING WARRANTY	\$376.00
36-MONTH TOWING WARRANTY	\$564.00
48-MONTY TOWING WARRANTY	\$689.00



BULLETIN

TO: Pierce Sales Representatives
 FROM: Chris Enders
 DATE: August 8, 2013
 RE: Delivery Lead-Time Schedule

Our monthly delivery update indicates that the following delivery ranges should be used for various product lines upon receipt of this notice. The shaded items reflect changes since the last notice. Please note that these ranges do not reflect options specific to a proposal that may impact the overall lead-time.

APPLETON BUILD:

*Notes below regarding additional time required for specific commercial chassis options.

Commercial Pumpers / Tankers	8.0 – 9.0 months
Custom Pumpers / PUC's / Rescue Pumpers / Tankers	7.5 – 8.5 months
Industrial Foam Pumpers	8.5 – 9.5 months
Snozzle®	9.0 – 10.0 months
Tillers	10.0 – 11.0 months
Industrial foam aerials	9.0 – 10.0 months
Bronto	11.0 – 12.0 months
All other Aerials (PAL/PAP/SKY)	7.5 – 8.5 months
ENCORE® commercial	7.5 – 8.5 months
ENCORE® custom	7.0 – 8.0 months
HDR commercial	8.5 – 9.5 months
HDR custom	8.5 – 9.5 months
BTO - mobile command post vehicles and SSV	HDR lead time + 10 weeks

BRADENTON BUILD:

*Notes below regarding additional time required for specific commercial chassis options.

Commercial Pumpers	7.5 – 8.5 months
Responders	7.5 – 8.5 months
Saber Pumpers	7.0 – 8.0 months
Tankers	7.5 – 8.5 months
Mini Pumpers	7.5 – 8.5 months
Rescues	7.5 – 8.5 months
Brush, Patrol	7.5 – 8.5 months

* Add one month for the following:
 4x4
 Axles of 26K or greater
 Peterbilt/Kenworth 4 Door Conversions
 Ford w/ gas engines

Please contact Chris Enders at (920) 832-3028 regarding any lead-time issues involving penalty clauses or special deliveries. Please contact Pat Konz at (920) 832-3682 for Stock availability.

Sample

EVIDENCE OF LIABILITY INSURANCE

April 1, 2013

PRODUCER Hays Companies of WI 1200 N. Mayfair Road Suite 100 Milwaukee, WI 53226 Phone: 414-443-0000 Fax: 414-259-8448	THIS DOCUMENT IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE DOCUMENT HOLDER. THIS DOCUMENT DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.
INSURED OSHKOSH CORPORATION 2307 Oregon Street Oshkosh, WI 54902	INSURERS AFFORDING COVERAGE INSURER A: Lexington Insurance Company INSURER B: Travelers Prop Casualty Co of America INSURER C: The Phoenix Insurance Company INSURER D: Berkley National Insurance Company

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS DOCUMENT MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CSR LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE	POLICY EXPIRATION DATE	LIMITS	
A	GENERAL LIABILITY COMMERCIAL GENERAL LIABILITY OCCURRENCE FORM INCL GARAGE LIABILITY	015438059	April 1, 2013	April 1, 2014	EACH OCCURRENCE	USD 1,000,000
					DAMAGE TO RENTED PREMISES (Ea occurrence)	USD 500,000
					MED EXP (Any one person)	EXCLUDED
					PERSONAL & ADV INJURY	USD 1,000,000
					GENERAL AGGREGATE	USD 5,000,000
					PRODUCTS-COMP/OP AGG	USD 1,000,000
B	AUTOMOBILE LIABILITY Any Auto (Symbol 1)	TJCAP118D2004TIL12	October 1, 2012	October 1, 2013	COMBINED SINGLE LIMIT (Ea Accident)	USD 1,000,000
A	UMBRELLA LIABILITY Occurrence Form	015438060	April 1, 2013	April 1, 2014	EACH OCCURRENCE	USD 15,000,000
					AGGREGATE	USD 15,000,000
B C	WORKERS' COMPENSATION AND EMPLOYERS LIABILITY	TRJUB117D757712 TC2NUB117D756512	October 1, 2012 October 1, 2012	October 1, 2013 October 1, 2013	WORKERS COMPENSATION	WC STATUTORY LIMITS
					E.L. EACH ACCIDENT	USD 1,000,000
					E.L. DISEASE - EA EMPLOYEE	USD 1,000,000
					E.L. DISEASE - POLICY LIMIT	USD 1,000,000
B	GARAGEKEEPERS	TJCAP118D2004TIL12	October 1, 2012	October 1, 2013	Limit of Insurance	USD 1,000,000
D	EXCESS LIABILITY	CEX0060017400	April 1, 2013	April 1, 2014	Each Occurrence/Aggregate	USD 10,000,000

ADDITIONAL INFORMATION

NAMED INSURED LISTING:

Oshkosh Corporation
Pierce Manufacturing Inc.
McNeilus Companies, Inc.
McNeilus Financial, Inc.
BAL OMFSP, LLC
Concrete Equipment Company Inc.
Iowa Mold Tooling Co., Inc.
Kewaunee Fabrications LLC
Jerr-Dan Corporation
JLG Industries Inc.
Viking Truck & Equipment Sales, Inc.
Medtec Ambulance, a Division of Pierce Manufacturing, Inc.
Oshkosh Specialty Vehicles, a Division of Pierce Manufacturing, Inc.
Frontline Communications, a Division of Pierce Manufacturing, Inc.

LICENSE CERTIFICATE

STATE OF FLORIDA
DEPARTMENT OF HIGHWAY SAFETY AND
MOTOR VEHICLES
DIVISION OF MOTORIST SERVICES

TEN 8 FIRE EQUIPMENT INC
2904 59TH AVE DR E
BRADENTON, FL 34203

License

FOR A DEALER IN FRANCHISED
MOTOR VEHICLES

ISSUANCE DATE

11/21/2012

LICENSE NUMBER

VF/1001939/1

PRIMARY USE

EXPIRATION DATE

12/31/2013

THIS CERTIFIES, THAT

TEN 8 FIRE EQUIPMENT INC

AT 2904 59TH AVE DR E
BRADENTON, FL 34203

IS HEREBY LICENSED UNDER THE PROVISIONS OF SECTION

320.27, FLORIDA STATUTES TO CONDUCT AND CARRY ON BUSINESS AS
A DEALER IN FRANCHISED MOTOR VEHICLES AT THE ABOVE DESCRIBED
LOCATION

GIVEN UNDER MY HAND AND SEAL THE ABOVE DATE WRITTEN.

Ed Boyko

BUREAU CHIEF



Clyde B. Walden

DIRECTOR

RECEIVED BY THE STATE OF FLORIDA

STATE OF FLORIDA

LICENSE CERTIFICATE

STATE OF FLORIDA
DEPARTMENT OF HIGHWAY SAFETY AND
MOTOR VEHICLES
DIVISION OF MOTORIST SERVICES

PIERCE MANUFACTURING INC
PO BOX 2017
APPLETON, WI 54912-2017

License

FOR A MANUFACTURER OF MOTOR
VEHICLES

LICENSE NUMBER
MV/1000178/1

PRIMARY LOT

EXPIRATION DATE

09/30/2013

EFFECTIVE DATE

09/06/2012

THIS CERTIFIES, THAT

PIERCE MANUFACTURING INC

AT 2600 AMERICAN DR
APPLETON, WI 54914

IS HEREBY LICENSED UNDER THE PROVISIONS OF SECTION

320.60-320.70, FLORIDA STATUTES TO CONDUCT AND CARRY ON
BUSINESS AS A MANUFACTURER OF MOTOR VEHICLES IN THE STATE OF
FLORIDA

GIVEN UNDER MY HAND AND SEAL THE ABOVE DATE WRITTEN.

Ed Broyles

BUREAU CHIEF



Chas. B. Walton

DIRECTOR

DSMV 84103 (REV. 2/11)S

STATE OF FLORIDA

VOID
IF
ALTERED

VOID
IF
ALTERED

LICENSE CERTIFICATE

STATE OF FLORIDA
DEPARTMENT OF HIGHWAY SAFETY AND
MOTOR VEHICLES
DIVISION OF MOTORIST SERVICES

PIERCE MANUFACTURING INC
1512 38TH AVE E
BRADENTON, FL 34208

License

FOR A MANUFACTURER OF MOTOR
VEHICLES

LICENSE NUMBER
MV/1000391/1

PRIMARY LOT

EXPIRATION DATE
09/30/2013

EFFECTIVE DATE
08/03/2012

THIS CERTIFIES, THAT

PIERCE MANUFACTURING INC

AT 1512 38TH AVE E
BRADENTON, FL 34208

IS HEREBY LICENSED UNDER THE PROVISIONS OF SECTION

320.60-320.70, FLORIDA STATUTES TO CONDUCT AND CARRY ON
BUSINESS AS A MANUFACTURER OF MOTOR VEHICLES IN THE STATE OF
FLORIDA.

GIVEN UNDER MY HAND AND SEAL THE ABOVE DATE WRITTEN.

Ed Broyles

BUREAU CHIEF



Chas. B. Walker

DIRECTOR

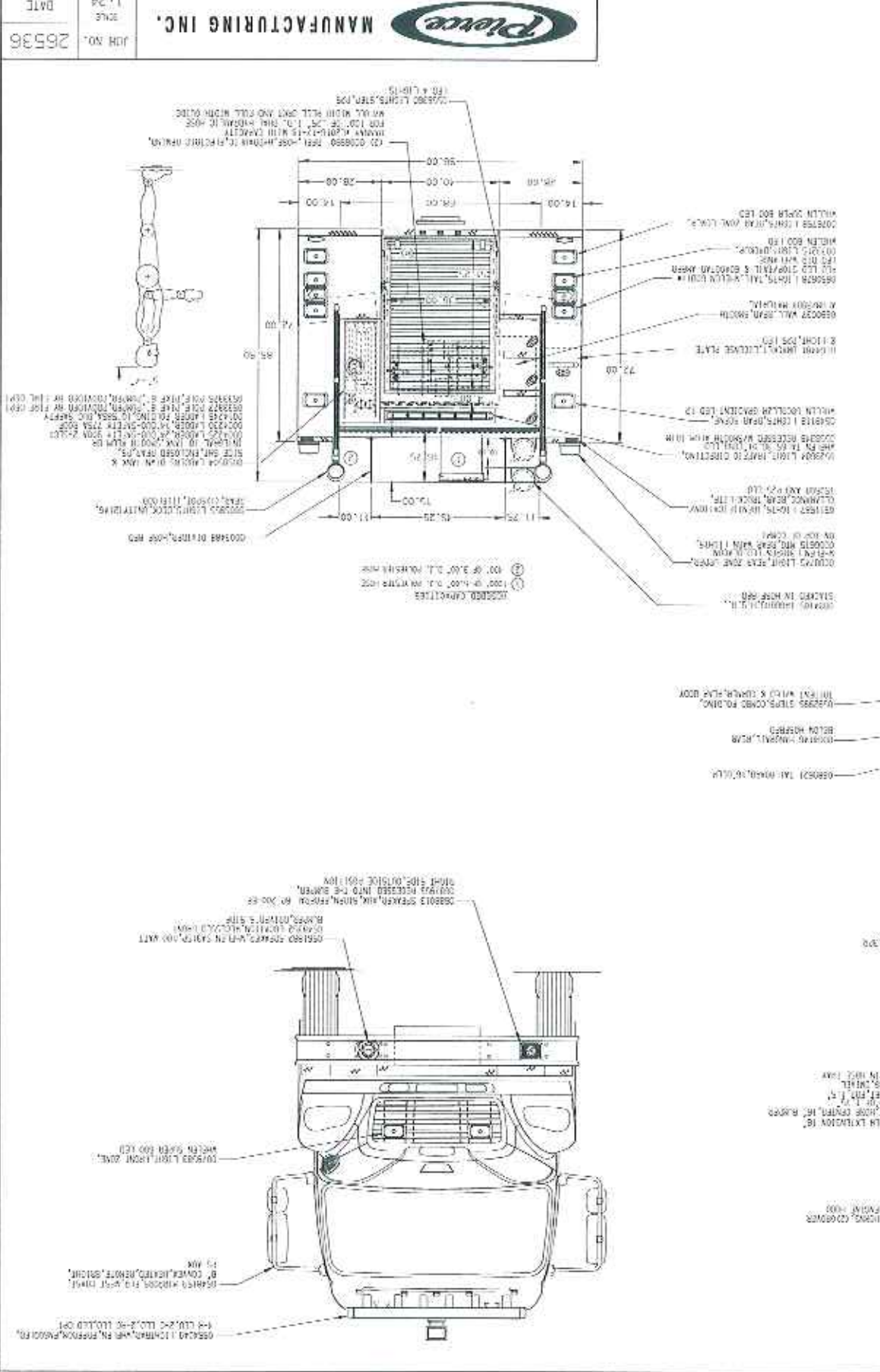
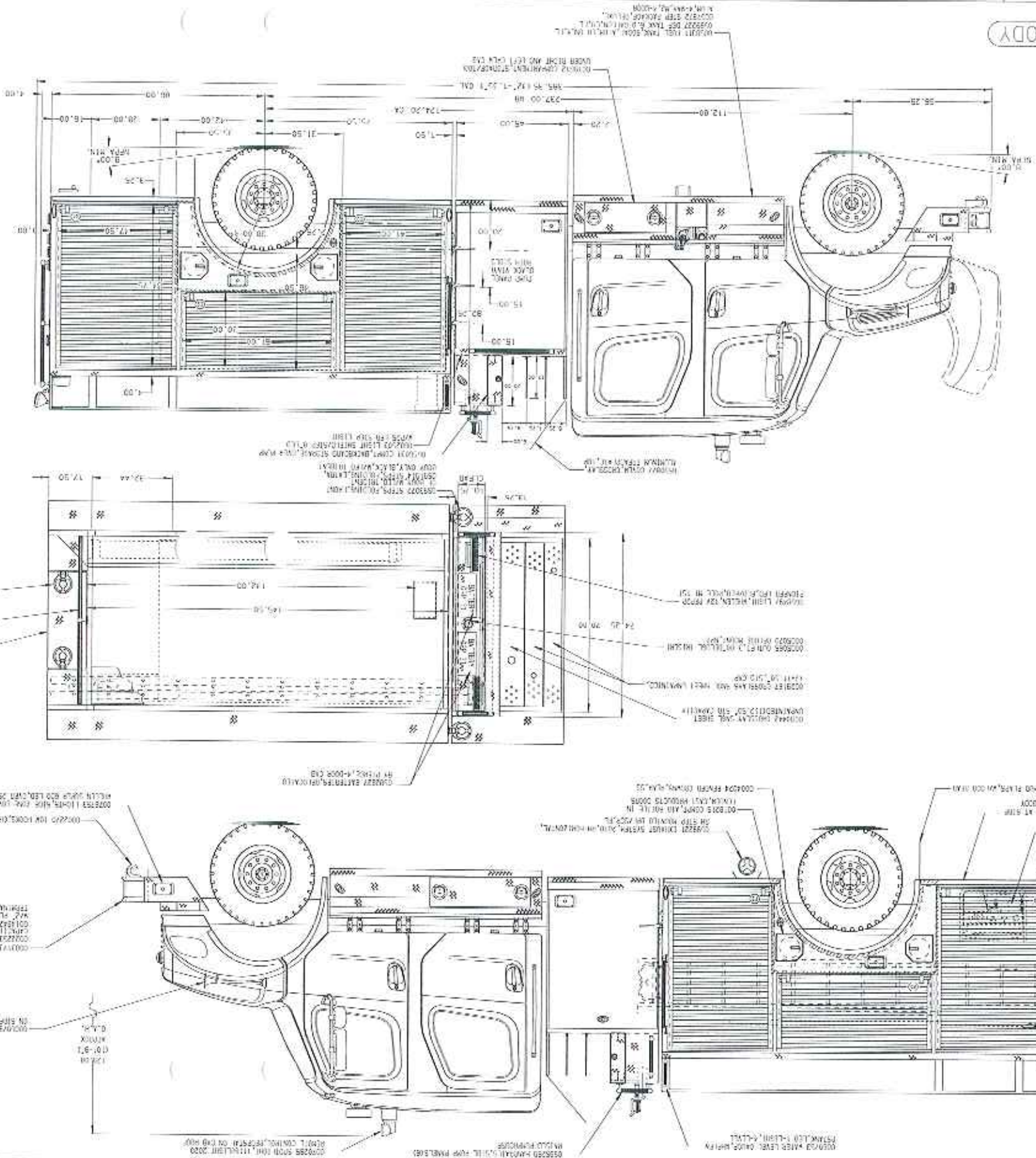
FORM 8-103 (Rev. 2/1115)

STATE OF FLORIDA

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(ALUMINUM BODY)

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